

THE  
**MEDICAL JOURNAL**  
**OF AUSTRALIA**

VOL. I.—10TH YEAR.

SYDNEY: SATURDAY, MARCH 3, 1923.

No. 9.

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## Table of Contents

	PAGE.		PAGE.
<b>ORIGINAL ARTICLES—</b>		<b>ABSTRACTS FROM CURRENT MEDICAL LITERATURE—</b>	
"Observations on the Use of Sugar Injections in Pulmonary Affections, Including the Tuberculous," by J. E. F. STEWART, M.B., CH.M. . . . .	225	Dermatology . . . . .	244
"The Differential Diagnosis of Dengue Fever and Influenza," by E. PAGET THURSTON, M.D., M.R.C.S. . . . .	227	Radiology . . . . .	245
"Medical Aspects of Life Assurance," by R. SCOT SKIRVING, M.B. . . . .	227	<b>BRITISH MEDICAL ASSOCIATION NEWS—</b>	
<b>REPORTS OF CASES—</b>		Scientific . . . . .	246
"Strangulated Hernia in an Infant," by IAN MCNEIL, M.B., B.S. . . . .	235	Medico-Political . . . . .	246
"Tuberculosis of the Skin," by C. JOYCE, M.B., B.S. . . . .	236	Election of Office-Bearers . . . . .	246
<b>REVIEWS—</b>		Missing Journals . . . . .	248
Medical Service in Warfare . . . . .	236	Nominations and Elections . . . . .	248
<b>NOTES ON BOOKS—</b>		<b>MEDICAL MATTERS IN PARLIAMENT—</b>	
The Queen of New Cambria . . . . .	236	The Hospitals and Charities Bill . . . . .	249
<b>ORIGINAL ARTICLES—</b>		<b>OBITUARY—</b>	
Laboratory Aids to Diagnosis . . . . .	237	In Memory of William Robert Aspinall and Arthur Cyril Albert Jekyll . . . . .	251
"The Lancet's" Hundredth Birthday . . . . .	239	Colin Campbell . . . . .	251
<b>CURRENT COMMENT—</b>		Alfred Peter Ross . . . . .	251
Benzyl Benzoate and Nitrogenous Metabolism . . . . .	239	<b>PROCEEDINGS OF THE AUSTRALIAN MEDICAL BOARDS—</b>	
The Fat-Soluble A and the Anti-Rhachitic Accessory Food Factor . . . . .	240	Queensland . . . . .	252
The Russian Famine . . . . .	242	<b>BOOKS RECEIVED</b> . . . . .	252
		<b>MEDICAL APPOINTMENTS</b> . . . . .	252
		<b>MEDICAL APPOINTMENTS VACANT, ETC.</b> . . . .	252
		<b>MEDICAL APPOINTMENTS: IMPORTANT NOTICE</b> . . . . .	252
		<b>DIARY FOR THE MONTH</b> . . . . .	252
		<b>EDITORIAL NOTICES</b> . . . . .	252

### OBSERVATIONS ON THE USE OF SUGAR INJECTIONS IN PULMONARY AFFECTIONS, INCLUDING THE TUBERCULOUS.<sup>1</sup>

By J. E. F. STEWART, M.B., CH.M. (GLASGOW),  
Perth, Western Australia.

OWING to various articles appearing in the medical journals dealing with the effect of sugar injections on the secretions (more particularly on the secretion of milk), I felt interested in a circular on the use of a preparation named "Aphlegmatol," in which the claim is made that this proprietary remedy is able to "cure" pulmonary disorders, including tuberculous conditions, by "saccharification" of the blood. Obviously such "cure" could only be brought about by the stimulant and nutritive properties of the sugars and it seemed possible that when the digestive organs are impaired, as is so commonly the case in the tuberculous, the direct absorption of sugar into the blood might do something to make good the wasting that occurs in this disease and thereby contribute towards the patient's resistance. Beyond this I expected nothing.

The circular I received contained the statement that the treatment was to be used under medical

supervision. I therefore informed the local distributor that I was willing to supervise any patient who might wish to try the treatment and that in all such cases I would definitely explain to them that I could not promise anything from it and would only use it experimentally at their own request until such time as they could carry on the treatment at home. They could then report progress to me by letter or otherwise.

The chief effects claimed for the treatment are (i.) gain in weight, (ii.) diminution of the quantity of the sputum and (iii.) alleviation or diminution of cough. Each ampoule contains 2.5 cubic centimetres of liquid, two to be injected. I believe that this is equivalent to 2.5 grammes of cane sugar.

*Patient I.*—This patient had no evidence of pulmonary disease of any kind, but complained of weakness and was anxious to try the treatment to ascertain its effect on his energy and weight. I tried it, but refused to continue its use after twenty injections, as I considered that it had produced no beneficial effect. The patient had lost weight.

*Patient III.*—This patient was sent to me as an alleged example of "cure" for examination. He gave a history of having undergone sanatorium treatment over three years previously. He had left the sanatorium weighing about 84.8 kilograms (13 stone 5 lb.), feeling well. On resuming work his weight was reduced to 76.2

<sup>1</sup> Read at a meeting of the Western Australian Branch of the British Medical Association on November 15, 1922.

kilograms (twelve stone). He was therefore induced to try "Aphlegmatol" injections. While he was receiving the injections he gained two and a quarter kilograms (five pounds). I found only a slight diminution of resonance on percussion below the left clavicle. He had a laryngitis, for which I advised him to see a specialist before he returned to the country. I learnt from the specialist that the laryngitis was probably tuberculous. I understand that he took with him a supply of "Aphlegmatol," as he believed that it kept up his weight and strength. I have not heard further from or of him.

*Patient VII.*—This patient gave a history of having had empyema of both antra of Highmore and empyema of the thoracic cavity. Her sputum was more suggestive of that from a cavity, such as an abscess or a bronchiectasis, than of that from lungs infected with tuberculosis. No tubercle bacilli were discovered on microscopical examination. She gained only three hundred grammes (half a pound) after fourteen injections. She continued the treatment at home for several months and consequently would have received at least one hundred and twenty injections. In her report she states that she has improved slightly and that the cough is slightly lessened. She makes no mention of her weight.

*Patient VIII.*—This patient stated that his normal weight was seventy-six kilograms (twelve stone). I found his weight to be eighty-two kilograms (12 stone 13½ lb.) at the time when he announced that he wished to try the sugar injections. He had had influenza and the signs at the base of his right lung had not cleared up completely when I examined him. He had been in the sanatorium on account of the condition of his lung. He had been told on leaving that the result of the examination of the last specimen of sputum had been favourable; no bacilli had been found. He had not been told the result of the previous examinations. I could not find any tubercle bacilli. This man received twenty injections. He reported three weeks after the commencement, but I have not heard since of his condition.

The remaining nine patients were all suffering from pulmonary tuberculosis. The diagnosis was made on clinical grounds and I found tubercle bacilli in the sputum of six of these patients.

*Patient II.*—This man was a miner suffering from fibrosis with secondary pulmonary tuberculosis. He asked to be allowed to try a course of twenty doses, but he obtained so little relief that he discontinued the treatment. He continued to lose weight. In the three weeks of the course he lost three and a half kilograms (seven and three-quarter pounds). He thought that his cough was easier. He died five months later.

*Patient XIII.*—This patient was also a miner with pulmonary tuberculosis superimposed on fibrosis. The man had previously gained 12.7 kilograms (two stone) in the course of six months as the result of rest. On resuming work on the land his weight quickly dropped from eighty-nine kilograms (fourteen stone) to sixty-six kilograms (10 stone 5½ lb.). Consequently he wished to try the effect of "Aphleg-

matol." My latest information is that he had thirty injections in all. He found them very painful. He derived no benefit from them; indeed, he thought that they had done harm rather than good. He therefore gave up the treatment.

I admit that these two patients cannot be regarded as a reasonable test for any drug. Pulmonary fibrosis is not amenable to any form of treatment. The following four patients, however, appear to be eminently suited for the trial and should have done well, if the treatment had any value:

*Patient V.*—This patient was under my observation for the whole course of sixty injections. During this time her weight fell from 70.68 kilograms to 69.66 kilograms (from 9 stone 10 lb. to 9 stone 7¼ lb.), a loss of one kilogram. The amount of her sputum varied and her cough also varied in severity, as usually occurs when other forms of treatment are applied or even when no treatment is given. She informed me that in contrast with this small loss of weight, she had gained 11.8 kilograms (1 stone 12 lb.) in the course of five months when undergoing sanatorium treatment. I have not had a reply to my letter of inquiry and therefore fear that she is dead.

*Patient VI.*—This patient weighed seventy-one kilograms (11 stone 2½ lb.) at the commencement of the treatment and gained 1.4 kilograms in the course of five weeks. He reported that at first his sputum had lessened and his cough had "softened." I have learned from his wife that he died fifteen months later. She thought that the injections had given some temporary benefit, but he gave them up. I estimate that he had at least sixty doses.

*Patient IX.*—This patient had slight lesions in the lungs. After a month's treatment she reported that she was feeling better, but since then she reported that after eighty injections she came to the conclusion that the treatment was not benefiting her, so she discontinued it.

*Patient X.*—This patient stated that her weight, 69.8 kilograms (9 stone 8 lb.) was 1.8 kilograms above her normal weight. She had about twenty injections, but blamed them for making her vomit, as well as being painful. She therefore discontinued them. A recent report informs me that she is doing well under the influence of rest and the like.

The remaining three patients were in the advanced stages of disease:

*Patient IV.*—The condition of this patient was hopeless. He was suffering from periodical attacks of vomiting and diarrhoea and had extensive disease in the lungs. He was an optimist and interpreted all fresh symptoms as signs of improvement. His weight at the commencement was 44.22 kilograms (6 stone 13½ lb.), while four months later it reached its highest point, namely, 44.68 kilograms. He lived in the neighbourhood of Donnybrook. Dr. Collins gave him some injections, I believe. He informs me that the patient lived until June 15, 1922, that is, thirteen months after I first saw him. Dr. Collins is of opinion that the injections may have had some effect in prolonging his life. I certainly did not expect him to live as long.

*Patient XI.*—This patient was also in an advanced



stage of disease. After four days she reported that she was sleeping better. She died two and a half months later, having used twenty injections. Her husband reports that they gave her too much pain to continue them, especially as no benefit was being received.

**Patient XII.**—The disease in this patient was advanced, but apparently of a chronic type. The only report I have received is to the effect that after one week his sputum was less in quantity and frothier in character.

Summing up, I find that three patients have gained weight, while four have lost weight. The cough was "softened" in one, diminished in four and unaltered in one. The sputum was diminished in quantity in three, while the treatment had no effect on the sputum in five.

#### Conclusions.

(1) The injection of sugar does not appear to possess any advantages over its oral administration, as in cough mixtures and the like, in so far as the effects on the cough and expectoration are concerned.

(2) Increase in weight was so slight in those patients in whom it occurred, that it may be regarded as negligible, at all events in those patients who remained under my observation.

(3) The method is painful; sometimes it is extremely painful. It tends to prevent patients with mild or early infection from pursuing their usual occupation.

(4) The results attributed to the injections in the literature were probably due to the improvement effected in the environment of the patients, to good and appropriate feeding and to rest. This is well evidenced by the fact that several of these patients had been inmates of sanatoria and had gained weight rapidly on the ordinary régime of the institutions. They had left weighing seven to eight kilograms more than when they had been admitted.

(5) It is possible that in cases of advanced tuberculosis or other wasting disease, when absorption is much impaired (*vide* Patient IV.), the injection of sugar into the tissues may do something to prolong life. It is, however, very questionable whether in the majority of these cases it is desirable to prolong life.

(6) With the doses employed by me glycosuria did not develop.

#### THE DIFFERENTIAL DIAGNOSIS OF DENGUE FEVER AND INFLUENZA.<sup>1</sup>

By E. PAGET THURSTON, M.D. (CAMBRIDGE), M.R.C.S.,  
Perth.

THE differential diagnosis of dengue fever and influenza often seems to present difficulties. I have therefore endeavoured to indicate the characters of

each disease and to compare the various diagnostic factors.

(1) *Incubation Period.*—The incubation period of dengue fever is from five to six days, while that of influenza is from one to two days.

(2) *Pyrexia.*—In dengue fever the temperature often reaches 40.5° C. or 41° C. (105° F. or 106° F.), while in influenza it seldom exceeds 40° C. (104° F.) in the absence of complications.

(3) *Rash.*—In dengue fever there are usually some spots on the skin. The most frequent sites are the hands and feet. In influenza a rash is quite exceptional.

(4) *Pain.*—In dengue fever pain may be severe, especially in the back. It assumes the nature of neuralgic pains and is accompanied by pain and itching of the palms and soles of the feet. In influenza there is usually severe aching rather than acute pain.

(5) *Sore Throat.*—In dengue fever the tongue and throat often swell, but ulceration is rare. In influenza an ulceration of the tonsils is not uncommon. The tongue is rarely swollen. Aphthous spots and herpes of the lips are frequent.

(6) *Complications.*—Affections of the lungs and bronchi are rare in dengue fever. In influenza pulmonary and bronchial complications are common.

(7) *Relapses.*—In dengue fever relapses are common and, in addition, there is always a remission of pyrexia for a day or two, followed by a higher temperature than before. It is at this stage that the rash appears on the hands and feet. Relapses are common in influenza, but there are no deferescence and recrudescence.

(8) *Desquamation.*—Peeling of the skin of the hands and feet is the rule in dengue fever. At times it is extensive. Desquamation is very rare in influenza.

(9) *Sequelæ.*—Anæmia and long-continued prostration are common to both diseases. Spinal degeneration has been observed after dengue fever.

(10) *Effect of Treatment.*—Acetyl-salicylic acid and other coal tar derivatives are useless in dengue fever. Belladonna may relieve the pain of dengue. For itching and the rash on the extremities, acetate of lead and glycerine are useful. The coal tar preparations are most useful in influenza.

#### MEDICAL ASPECTS OF LIFE ASSURANCE.<sup>1</sup>

By R. SCOT SKIRVING, M.B.,

Senior Surgeon to Saint Vincent's Hospital, Sydney;  
Chief Medical Adviser to the Australian Mutual  
Provident Society.

THE active part played by medical men in life assurance is not a practice as ancient as the business of life assurance itself. I am ignorant of how

<sup>1</sup> Read at a meeting of the Western Australian Branch of the British Medical Association on November 15, 1922.

<sup>1</sup> Being a lecture delivered at the Post-Graduate Course in Medicine in Sydney on January 18, 1923.

long the practice of life assurance itself has existed as a definite business, although the mere term "life assurance" is certainly an ancient one, for Moses, in telling his fellow countrymen of the evils which would fall upon them as individuals, if they did not walk in the paths of righteousness, says: "Thy life shall hang in doubt before thee and thou shalt fear day and night and shalt have none assurance of thy life!" Quite a picture of the parlous state of the unassured in these latter days of incertitude in worldly things.

When I think over the literature of life assurance in its medical aspect, I am struck by its meagreness. Long years ago Sieveking wrote an admirable little monograph on the medical side of life assurance. It was excellent for its day, but it is now in many subjects far behind our present state of knowledge. Perhaps the best text-book at present is that of Greene—a really fine performance—but it also is now not quite up to date and it has the objection that it goes into needless medical detail of all sorts. It becomes largely an incomplete text-book of diagnosis. This, in my judgement, is not what a text-book on life assurance should be. To the actuary it is confusing; he does not need to know the learning which tells a medical man whether disease is present or the clinical methods for its demonstration, nor does the doctor here require an incomplete text-book of medicine to teach him signs and symptoms, which, if he does not know already, he has no business to be a medical adviser to an assurance company. What we need is a modern, up-to-date text-book of medical life assurance which will deal with diseases and other morbid conditions as diagnosed by the examiner himself, their prognosis and the assessment proper to each individual case and, further, of such a character that any well-educated assurance official can grasp the bearing of each problem without being confused by side issues and needless technicalities and so share the medical man's responsibility in dealing with proposals. Especially would such a text-book be useful to all junior insurance officers, because it must happen not seldom that men reach high positions in the assurance world with much knowledge of their business generally, but with curiously little practical acquaintance with the assessment of lives.

I think by now you must be asking yourselves, when is this man going to get on to the proper matter of his discourse? I will, therefore, proceed.

I propose to discuss the subject under eight headings: Body measurements (underweights and overweights), heredity, tuberculosis and cancer, albuminuria of young people, glycosuria, heart affections, syphilis and the assessment value in certain occupations and lives.

#### Body Measurements.

It came upon me recently as a surprise that we have no standard British table of weights in relation to height and age; far less, one comprehensive of chest measurements. It is true that forty years ago Jonathan Hutchinson compiled a small one, dealing,

so far as I remember, only with a fully grown, healthy man of thirty. Here, in Australia, the reproach, so far as the Australian Mutual Provident Society is concerned, is not deserved, for a good many years ago a table was compiled under the incentive and supervision of Mr. Teece and Mr. Carment. It represents the standard of height, weight and chest measurements for Australians. I dare say that it is, therefore, not strictly correct for inhabitants of other portions of the Empire, nor for Germans and Austrians, which races run several pounds heavier than we do in flesh and in whom, may I add without undue emotion, recent statistics have shown to have a shorter expectation of life than our people, by about two years. On the whole, our table has stood the test of time in Australasia and the Society has had no cause to doubt the correctness of deduction and assessments made from it. I must tell you, of course, that it represents the weight and height with clothes and boots on; but the chest measurements are those of the unclothed thorax. It is essentially representative of male proponents. In the matter of female lives, at the time it was made, we had not enough women to make it worth while to tabulate them separately, but a rough estimate of proportion was made in such fashion that in assessment women proponents were allowed to fall below 15% of the tabular average for age and height without penalization in their assessment. This rough rule has worked quite well in practice, but, no doubt, it would be worth while, for the sake of scientific accuracy, to have a table on all fours with that in your hands, calculated solely from female proponents.

Now, what percentage above or below the tabulated standard of normality shall be regarded as pathological and meriting penalization? Each case should be judged on its own merits. Various factors may be allowed consideration is giving one's judgement, such as family characteristics, habits and occupation. On the whole, it seems not far wrong to regard in men 15% either way as being within the limits of a "select risk." If the light weight occurs, say, in a family in which tuberculosis is present, then more stress should be given to the fact than in proponents with a perfect family history.

Heavyweights, on the whole, one must regard as not select risks. In early youth, especially I think in girls, you may meet heavyweights in which in full adult life the grossness disappears; but, as a rule, proponents whose weight is 20% or more above the normal need close scrutiny and deserve loading. Certainly three years and, if above 25%, I think five years addition is not too severe. Fat people do not stand acute disease as well as spare folk. They make poor subjects for severe operations. Their tissues often heal less kindly than those whose bodies are not swathed in blubber. In this connexion I may call your attention to a little table put together by Mr. C. A. Elliott (to whom I am indebted for much help and advice in preparing this paper), showing the mortality of influenza among the policy holders in the Australian Mutual Provident Society:

MORTALITY FROM INFLUENZA IN THE RECENT ENDEMIC AMONG  
POLICY HOLDERS IN THE AUSTRALIAN MUTUAL  
PROVIDENT SOCIETY.

Branch.	Over Normal.	Normal. <sup>1</sup>	Under Normal.	Total.
Head Office, Australia Mutual Provident Society .. . . .	71	65	44	180
Victoria .. . . .	122	104	76	302
New Zealand .. . . .	109	86	69	264
Queensland .. . . .	20	21	37	78
South Australia .. . . .	28	19	31	78
Western Australia .. . . .	22	9	13	44
Tasmania .. . . .	11	12	7	30
London .. . . .	6	4	4	14
Total .. . . .	389	329	281	990

I think it was Tallyrand who said that "statistics are lies in the shape of numbers"—a very unpalatable axiom to actuaries, whose profession is based so largely on statistical evidence. No doubt one swallow does not make a summer, yet even the slight inference to be drawn from this small, single investigation goes to show that persons greatly divergent from the common weight of mankind are apparently more easily slain by intercurrent disease than those of a normal standard. I do not suppose that overweights are more likely to contract influenza than normal persons, but it is a common observation—and these figures rather support the assumption—that if they are attacked, they are less likely to resist the lethal effect of the disease. The same remark applies in a lessened degree to the lightweights.

I think I ought, however, to add that it is in the first four decades of life that the underweight is most deserving of penalization. In later years the

<sup>1</sup> Seven pounds above or seven pounds below.

spare old man or woman is a better subject for the ills of age than the fat, pendulous-bellied old person.

As to children, weedy, small, with poor chest development—"Shilpit," as the good Scots word terms them—I think the justest course is more often deferment, rather than a pin-pricking loading; for in a couple of years, with fresh air, exercise and food suited to their years, one sees the most unpromising scarecrows of children develop into quite hefty young people who merit "first-class" acceptance.

When you look at the Australian Mutual Provident Society's tables, which I hope you will regard with approval, it may interest you to compare its figures for age 25 with those of certain other tables which I give below.

#### Heredity.

No medical man in inquiring into the history of a patient, can neglect the question of heredity, nor can it be put aside in assessing a risk in life assurance. Our questions on this subject in the "personal statement" go as far as is possible in the somewhat rapid and casual assurance examination of proponents. Often the information is inexact, incorrect or not forthcoming—not always, I fear, from simple ignorance on the part of the proponent. The influence of heredity is a matter that all educated, observant folk have noted from generation to generation. We recognize habits of mind and peculiarities of look, colour and configuration among our contemporaries which are reminiscent of the same things in the progenitors of those at whom we are looking.

"Born into life! man grows  
Forth from his parents' stem  
And blends their bloods, as those  
Of theirs are blent in them;

So each new man strikes root into a far fore-time."

If this be so in the tissues and mentality of healthy men, need we wonder that pathological

COMPARISON OF HEIGHT AND WEIGHT TABLES.

Age.	Height.	Average Weight.				
		Australian Mutual Provident Society's Experience.	Medical Directors' Association (United States).	Medico- Actuarial Investigation (United States).	National Fraternal Congress (United States.)	Scottish Life Assurance Company's Experience.
25 years	5 ft. 0 in.	9 st. 0 lb.	8 st. 13 lb.	8 st. 12 lb.	8 st. 13 lb.	—
	5 ft. 3 in.	9 st. 6 lb.	9 st. 5 lb.	9 st. 5 lb.	9 st. 5 lb.	9 st. 1 lb.
	5 ft. 6 in.	10 st. 1 lb.	10 st. 2 lb.	10 st. 2 lb.	10 st. 2 lb.	9 st. 12 lb.
	5 ft. 9 in.	10 st. 13 lb.	11 st. 1 lb.	11 st. 0 lb.	11 st. 1 lb.	10 st. 11 lb.
	6 ft. 0 in.	12 st. 0 lb.	12 st. 2 lb.	12 st. 1 lb.	12 st. 2 lb.	11 st. 10 lb.
35 years	5 ft. 0 in.	9 st. 8 lb.	9 st. 5 lb.	9 st. 3 lb.	9 st. 5 lb.	—
	5 ft. 3 in.	10 st. 0 lb.	9 st. 10 lb.	9 st. 11 lb.	9 st. 11 lb.	9 st. 7 lb.
	5 ft. 6 in.	10 st. 8 lb.	10 st. 7 lb.	10 st. 8 lb.	10 st. 7 lb.	10 st. 5 lb.
	5 ft. 9 in.	11 st. 4 lb.	11 st. 8 lb.	11 st. 8 lb.	11 st. 8 lb.	11 st. 5 lb.
	6 ft. 0 in.	12 st. 8 lb.	12 st. 11 lb.	12 st. 10 lb.	12 st. 11 lb.	12 st. 6 lb.
45 years	5 ft. 0 in.	10 st. 0 lb.	9 st. 8 lb.	9 st. 8 lb.	9 st. 8 lb.	—
	5 ft. 3 in.	10 st. 6 lb.	10 st. 1 lb.	10 st. 1 lb.	10 st. 1 lb.	9 st. 13 lb.
	5 ft. 6 in.	10 st. 11 lb.	10 st. 11 lb.	10 st. 12 lb.	10 st. 11 lb.	10 st. 11 lb.
	5 ft. 9 in.	11 st. 5 lb.	11 st. 12 lb.	11 st. 12 lb.	11 st. 12 lb.	11 st. 12 lb.
	6 ft. 0 in.	12 st. 9 lb.	13 st. 1 lb.	13 st. 1 lb.	13 st. 1 lb.	12 st. 13 lb.



strains are also so handed down? The neurotic forebears will throw the neurotic progeny and we may look for the insanities and lesser neuroses in those whose forebears were not normal in their nervous systems. Of heredity in tuberculosis I shall speak presently. It is enough here to mention that members of a tuberculous family must be looked to specially to see that their personal record is above suspicion.

With regard to cancer the evidence is less manifest and, although I recognize a type in which malignant disease is possibly more likely to occur than in those not of that type, yet I always thought it unjustifiable to load a proponent three years because one of his parents died of cancer. With the presence of more than one death from cancer in the proponent's immediate blood relations, I think an addition a common-sense precaution. Heredity may or may not play a part in other diseases, such as gout, rheumatism, even Bright's disease and several others, but here I cannot detain you with their discussion. Suffice it to say that the most modern practice would not consider a loading at all necessary in any given case where only one parent has died of such maladies.

In the assurance of young children I wish to make a definite expression of opinion, namely, in the matter of children's deferred assurance. No doubt each company has tables dealing with this class of assurance. Here, I believe, the practice has been in the huge majority of cases to take the risks without medical examination at first-class rates. If the assurance society is ready to take these cases without medical examination, well and good; it is their business and it is not for a medical man to criticize; but as they have the family history at any rate, why should not they load if it discloses unfavourable features or if the child is grossly divergent from the standard of weight and development for his height and age? Why should they take a case which richly deserves penalization at select rates? If the person dies before twenty-one, of course the transaction comes to an end with no one hurt, but if he lives till twenty-one, they have probably saddled themselves with a damaged article at top price. I consider, then, that given a child whose family history discloses definitely unfavourable features and especially if the child is not within a fair distance of normality in weight or development, that child should be loaded—or deferred.

#### Tuberculosis and Cancer.

In the matter of tuberculosis it is well that the laity should quite grasp that when people talk of consumption as an hereditary disease, they do not mean, or at least they ought not to mean, that consumption is hereditary in the sense that the child of tuberculous parents is born tuberculous, as so often tragically happens in the case of the infant of syphilitic parents. I do not discuss the pathological possibility of an infant actually born with tuberculosis in its tissues. Perhaps this may have rarely occurred, but so far as practical experience goes the child of tuberculous stock is born as free of tuberculosis as the infant of the sturdiest folk.

What the child inherits is a weakness of tissue, a weakness of resisting power to the invasion of tuberculosis; and so, in a sense, the malady is hereditary so far as vulnerability is concerned; but this is as far as we can go. It is environment and exposure to infection in post-natal life which makes the child of tainted stock, with its family vulnerability, prone to fall a victim to this unhappy disease. I suppose, therefore, that if a child born of tuberculous stock were taken at birth to some unknown island and lived a free, natural life, with fine air, sunshine, good food and no intercourse with civilization and its attendant micro-organisms, that child, born of bad stock and with perhaps the look and configuration which one associates with the tuberculous (in women, Tennyson's "May Queen" might serve as a prototype), will, nevertheless, live out its expectation of life with, so far as tuberculosis is concerned, unshortened longevity. But the matter is far otherwise if such a child lives the ordinary life of a populated community. I suppose the aphorism that "Everybody, in the end, has a mouthful of tubercle," is nearly correct; but the vigorous scion of a vigorous stock, if he gets an infection, provides that resistance to it which, in the fight between the invading organisms and the phagocytic power of the body, vanquishes the hosts of death and so the individual recovers the condition of health.

Holding these views, I cannot therefore too strongly insist that proponents with a history of tuberculosis in their near relatives are to be looked at with close care in their medical examination and if their appearance is suggestive of their family diathesis, their body-weight below par, their configuration meagre and vital capacity small, the care exercised in their acceptance must be greater. Under weight by 15% in such a case counts far more than the same lightness of weight in a proponent of non-tuberculous stock. Keen scrutiny, too, is needed in seeking for the non-pulmonary evidences of tuberculous infection—old joint lesions, glandular scars, renal disturbances *et cetera*.

As the importance of a tuberculous history diminishes in gravity of import as the years pass, it is possible to evolve a kind of general working rule for the assessment of these cases. Even so, however, I must remind you that senile tuberculosis is not very uncommon and that, though a man of tuberculous history has reached forty-five years unscathed, it does not necessarily follow that he will live out his expectation of life and die of some malady other than a tuberculous one.

In my judgement, no "life" in which one or other parent died of tuberculous should, up to at the very earliest thirty-five, be accepted without a loading. Even if the personal record is satisfactory, I suggest that three years addition is fair. Indeed, too, I see no sufficient reason to omit exacting the same addition where a brother or sister has died of consumption. If the personal record is not flawless and the body-weight not up to the normal, the addition may well be made larger. In this and the following assessments I refer to whole life assurance policies.

When both parents or one parent and a brother



or sister died of tuberculosis, the person merits at least five years addition.

When the disease has killed still more in one family, for example, more brothers or sisters, or where it appears in the families of his parents' brothers or sisters, five years addition is not sufficient in persons under forty. Seven or ten years is quite proper.

After forty years of age I am disposed to take a more lenient view, for, although, as I have just said, senile tuberculosis is not very uncommon, I think companies in the long run will lose little by accepting "risks" after the age of forty to forty-five with no penalization, if the personal examination and environment is absolutely good. Of course, there are some cases where this disease has been a positive destroying angel in a family and, even if the survivor has reached forty years undamaged, common prudence will impel us to make him pay more for his cover than if he had a less sinister record.

I need not detain you with the "cancer" question, as I have already shortly referred to it; moreover, the matter is one in which scientific inquiry is not yet nearly on such true ground as with tuberculosis. We know what tuberculosis is; we do not yet know the true meaning of cancer.

#### Albuminuria in Young Persons.

This condition is one of the commonest problems of life assurance and probably gives rise to more annoyance to the proponent's friends and to the agents concerned in the proposal than any other class of case. You may realize how common this condition is among proponents when in one year, *viz.*, July 1, 1911, to July 1, 1912, when for purposes of an inquiry into the subject I had all cases tabulated, we found it in 156 out of 7,800 proposals, representing 2% of all applicants for assurance in that year. Of these the sex and age were as under:

CASES IN ONE YEAR.

Sex.		Age.			Total Lives.
Male.	Female.	15 Years and Under	16 to 25 inclusive.	Over 25 Years.	
141	15	17	112	27	156

The laity find it difficult to understand why medical examiners delay—ask for further specimens and often advise loading or deferment. To the agent I admit it must be annoying to find some fine, wholesome looking boy's assurance delayed or refused for the time. My sympathy is with them, for when, after perhaps faithful solicitation, the "rat is apparently safely in the trap," it yet may escape from the dubiety of the doctor. I wish to tell you clearly that the differentiation of albuminuria of youth, those so-called adolescent, cyclic or physiological varieties, from those of organic renal origin is a matter sometimes of difficulty; but, granted time, a little patience and a sound knowledge of our profession, the correct diagnosis can practically always be arrived at. Yet often it takes time, involving

several examinations—microscopic and otherwise—of the urine procured at different times of the day or perhaps after certain diet and exercise. If these and a thorough general examination have been made, almost invariably a correct opinion can be given. When the opinion has been arrived at, then we are in a position to assess, but not till then. I sometimes hear somewhat illogical criticism on the assessment of these "risks"; for instance, I have known proponents who showed the presence of albumin and in whom after careful consideration and full use of all the clinical methods compatible with the rough-and-ready practice of life assurance the medical examiner felt convinced that the albumin was of the adolescent variety; the case was therefore accepted select or, if more than twenty-five or thirty years of age, perhaps with a small loading. I have known a critic cite such cases as an example of the inconsistency of the assessment, because, said he, "if you examined such a person a month later you might find albumin." Exactly so! You might find albumin off and on in the proponent's urine for some years after acceptance; but they would not necessarily on that account be other than what careful previous examination had decided them to be, namely, albuminurias of the non-organic type. We must do our best according to our present lights, by meticulously excluding the organic cases by equally meticulous methods of examination so far as is compatible with the short time granted to us in life assurance examinations. In this connexion I may refer to the question of blood pressure. It is estimated clinically by the erudite touch of the doctors' finger on the pulse; but when the result is expressed in pressure units, it is obtained by the use of the sphygmomanometer. The use of this instrument is not to be regarded as a holy rite, full of prophetic and certain information. Within certain limits and properly used and interpreted, it does convey useful information. In the matter of albuminuria it is one and just one of the clinical means of differentiation of the class of cases under discussion from those of organic origin. In youth the pulse is not hard and the blood pressure is not high. I mean that its height is in keeping with the age of the proponent if all is well. In later life the blood pressure rises in a known ratio. Up to about forty-five years the normal blood pressure is 130 to 140 millimetres. Between fifty and seventy years a blood pressure of 150 to 160 would not be considered abnormal; but if it was present before forty it would certainly need close scrutiny. Any gross divergence of the blood pressure for the time of life would be pathological and would provoke further inquiry as to the cause. In renal disease of a lasting character the heart hypertrophies, the pulse gets harder and by measurement the blood pressure is shown to be raised. Therefore, in excluding an organic renal origin, the sphygmomanometer is a useful instrument in a doubtful case of albuminuria.

Microscopical examination is also of use and called for in cases of incertitude, because the presence of abnormal substances in the urine are demonstrable by it. For instance, pus and certain forms

of epithelial cells may suggest that the albumin is from portions of the urinary tract other than renal. Or, more important still, the finding of tube casts, especially granular or epithelial, makes an organic change in the kidney a more probable explanation of the albuminuria than the merely "functional" view of the abnormality. In short, in the diagnosis of these cases there is no one infallible sign; the correct conclusion must be arrived at by the summing up of a number of diverse points—the age and general health of the patient, the incidence and amount of the albumin, the presence or absence of casts, an abnormal blood pressure and the presence or absence of any causal factor, such as coincident heart disease or past maladies, such as scarlet fever or diphtheria.

In the Australian Mutual Provident Society, after much careful consideration of the points I have just mentioned, our practice is guided generally by the following rules: If the urine contain albumin, three further samples are obtained, one on rising, one passed during the day before the examiner and one at bed-time. If of these (a) one at least is free, (b) the proponent is absolutely first class in every other way and (c) the examiner certifies that to the best of his opinion the albuminuria is of the adolescent, cyclic, functional or so-called physiological type, proponents under thirty years of age may be taken select, but those over thirty are dealt with on their individual merits, *id est*, loaded or deferred. The medical referee is expected to state fully and clearly the grounds for his opinion and to say if he has tested the blood pressure and looked for casts.

If three further samples cannot be obtained, but the examiner in fully persuaded that the condition is not organic, but of the functional type, we still accept proponents under thirty years select for amounts not exceeding £1,000 in all. All other cases are deferred for further inquiry and examination.

#### Sugar in the Urine.

This condition is not so often an incident in assurance practice, but it occurs fairly frequently and is often a stumbling block to acceptance.

A great deal of good original work has been done in the last few years on the subject of glycosuria and it is well that medical examiners should read the literature on the subject. There are degrees of gravity in cases of glycosuria and in some quarters there has been, in my opinion, too great an effort sharply to differentiate so-called dietetic glycosuria from true diabetes. For my part, I agree with a recent writer on the subject, that "every case of glycosuria should be looked upon with suspicion. There may be a few cases of *diabetes innocens* and a few of renal glycosuria, but the vast majority must be looked upon as diabetics" (or, at least, I should interpolate, potential diabetics) "and dealt with accordingly."

According to the faith we at present profess, the condition which we call diabetes or glycosuria is due to a deficiency or inefficiency of the internal secretion of the pancreas, which fails to convert sugar from the crystalline to the colloid form, in which form it must be present before it can be

utilized by the body cell. Such a failure, with consequent appearance of sugar in the urine, may or may not be related to gross disease; but, whether or no. I hold that in assurance practice glycosuria must always be treated with respect and suspicion. In no case, even where wise treatment removes all symptoms, do I consider the life really select. I do not wish to set too high a standard of sugar tolerance, but when it is clearly low in any proponent I should be unwilling to take the case as select. Dr. Wilkinson, of Melbourne, sagely remarks: "There is reason to believe that the white races generally are overtaxing the pancreatic function. The present-day enormous consumption of carbo-hydrate, particularly sugar, is a new thing for the race. In America the sugar consumption per head has risen from 4,990 grammes in 1810 to 40,700 grammes per head in 1916. Perhaps a sugar famine would not be an unmixed evil."

Having said so much on the general attitude of many medical men towards the presence of sugar in the urine, I turn to the practical point of finding it there for a certainty. The common tests are liable to fallacies, such as impure reagents and the presence of bodies other than glucose which may lead to the reduction of copper in Fehling's test. This is not a clinical lecture and I will not pursue the point, but you must be expected to use good, fresh solutions and to know and ask after possible causes of an indefinite sugar reaction. If there still be doubt and the importance of the case merit the time and expense, special tests may be employed, such as the use of the polarimeter and the fermentation test. Camidge apparently now favours the use of the proponent's blood as the body fluid to be used in testing. In assurance practice at present, I consider Fehling's test, rightly applied, is sufficient in 90% of cases; in the remainder it may occasionally be necessary to seek certainty from the other tests I have mentioned.

Our practice in the Australian Mutual Provident Society, as a general rule, is to look on young people who have shown sugar in their urine with greater distrust than those who in later life are occasionally glycosuric. The point is still unsettled, but I personally feel sure that the young glycosuric has a more uncertain tenure of life than his older co-sufferer.

If then a young glycosuric applies, I advise as a rule deferment. In all proponents, old or young, several specimens are examined and if three subsequent specimens are found free of sugar and all other signs of diabetes are absent, that is, no wasting, thirst or diminished knee jerks, absence of boils or other troubles seen in diabetics, we may accept the person, usually loading him three or five years. And this is as far as at present we feel justified to go in leniency.

#### Heart Affections.

In this class of case so much depends on the individual skill and, perhaps, bias of the examiner that I cannot see how hard and fast rules can ever be laid down in dealing with these proponents. It is perfectly true that our conception of the gravity

and influence of certain heart lesions on usefulness and longevity has rightly altered in later years, largely, perhaps, due to the influence of Sir Thomas Lewis and Sir James Mackenzie; but the teaching of the latter is not always a completely safe guide when we deal in assurance cases with the question of what murmurs are innocent and negligible and what are not. Sir James Mackenzie, doubtless, may be in most instances sure and correct, but most of us are a good deal less competent than Sir James Mackenzie and some of his disciples are too prone to believe that they have quite assimilated the "sincere milk of the word" of their master and are dangerously optimistic without the sure premisses and ripened experience of their teacher, which makes safe a justified optimism in certain cases. One of my former teachers had a good aphorism: "Never make up your mind about a heart or its murmurs on one examination"; an excellent axiom to carry out, if you can, in assurance practice. It is a safe rule, as Professor Gulland says: "To assume that a murmur always means something and that the heart is not acting normally at the time it is heard." The trouble may be of a temporary character; it may be due to hurry or worry or excitement or to a passing condition of weakness, with what I may call relative insufficiency of valve closure; but, whatever be the cause, the case calls clamantly for subsequent examination—above all, for the estimation of cardiac tolerance of work—and so you ought in these days to be able in these and in all cardiac cases to test the work capacity of the cardiac muscle in so far as the hasty methods of assurance will permit. In the practical dealing with heart cases, it is, as I have said, very hard to lay down stiff rules so as to avoid loss from the admission of damaged lives owing to the insufficient knowledge and judgement of examiners or to lose business by sending proponents away because they just had a "murmur" and no faithful effort being made to weigh its significance. Nothing will remedy this difficulty and lead us in the middle way of safety, but a sound knowledge of clinical medicine and an acquaintance with modern work in cardiac disease. In youth, without signs of degenerate changes, with hearts which stand the test of work and satisfy the examiner as to their muscle competence, I believe that many cases with systolic murmurs, especially pulmonary, were rejected in the past which with fuller knowledge may be accepted now with or without loading.

There are, however, two well-marked classes of murmurs which, taken with certain other signs, indicate with sufficient certainty an organic lesion of the mitral or aortic valves. I refer to a presystolic murmur, often the evil legacy of acute rheumatism in youth, or an aortic diastolic murmur. In the first case it means obstruction in the left auriculo-ventricular opening and in the latter, incompetence of the aortic valves. I would refuse either case. It is true that many medical men, recognizing that aortic incompetence, which, being perhaps the lesion most often found where death is dramatically sudden, is at the same time that valvular lesion with which men have lived long occupied lives, some-

times in unconscious carelessness of the sword suspended over their heads. Some medical men have suggested acceptance with a loading of cases of aortic disease in the earlier decades of life due to rheumatism, while absolutely barring those due to degenerate changes of later life, notably as an aftermath of syphilis, where, remember, it has been shown that the process, although due to syphilis, is, like essential nerve lesions, such as tabes or general paralysis, notably uninfluenced by any known anti-syphilitic treatment. For myself, here in Australia I do not approve of taking them at any price or at any price that an Australian proponent would pay for assurance. It would seem that in England proponents of this class are determined to obtain cover and will pay ratings up which would never be accepted by our assuring public. I dealt at greater length on this subject in a report in 1914, based partly on special inquiries made in America and Great Britain, where I found the views I have just expressed for the most part endorsed.

I hate finding fault with my brethren when I am honestly conscious of my own deficiencies, but I wish examiners in their reports would try to express their ideas of these cases in such a way that chief medical referees could really grasp what was the true significance of the murmur or other abnormality, as it appeared to the man who actually saw the proponent. Many such reports are colourless and utterly unconvincing. They say as little as possible. They will report a murmur, but its conduction, its condition before and after work, the cardiac area and all other points which help one to decide on the significance of the abnormal sound, are left unrecorded and in the summary the person is deferred because he has *morbus cordis*. What can one do with reports so devoid of the imaginative faculty which utterly fail to make the case a real live presentment in words of the clinical picture?

#### Syphilis.

If the recent war, like all other great conflicts, has caused an outburst of syphilis in the world, it has also called out intense attention to the treatment. In the history of this disease there have been high tides of optimism and low tides of pessimism in the medical outlook of the future of the syphilitic, largely due to the apparent influence of treatment in the removal of symptoms; but, neither in the past nor even now were or are we ever justified in believing that, because certain immediate obtrusive symptoms disappeared under treatment, the disease was conquered. Mercury, iodide of potash and, lastly, salvarsan or the modifications of that complex substance have all acted at times like a charm. With regard to salvarsan, I well recollect my astonishment when I beheld the most urgent, dangerous signs of meningo-vascular syphilis melt away in a few days. It seemed too good to be true—that, to quote my brother's words, "We had knocked over the whole covey at one shot." Unfortunately, there are a number of birds in the covey of syphilis—and, although by wise early treatment, both new and old, we may abolish secondary symptoms and disperse others of later date, yet up to now we have no cer-



tain knowledge that even the most vigorous, swiftly-applied treatment will prevent in any individual case the many later manifestations of the syphilitic poison, such as tabes, general paralysis of the insane and arterial degenerations, far less cure them when they occur. I am, however, sanguine enough to think that, owing to new methods, the future will show that the disease will not be merely scotched, but that these later unhappy results may be prevented or cured. Jonathan Hutchinson about thirty years ago actually said: "That the fact that a proposer had had syphilis, except in a very few instances, was not likely thereby to have a shortened life and it should not interfere with his acceptance at ordinary rate by assurance societies"; and, probably, his great and deserved influence made many other medical men take this too cheerful view of the matter. I certainly do not agree with this outlook. Why even now, with all the value of salvarsan treatment and the check and help from the Wassermann test, I do not believe you will find many medical men to endorse this optimistic opinion, for we know that it is not correct. Actuarial research helps to disprove such a view. The Scandinavian offices found "the rate of mortality of such lives to be 163% of the expectation among those who had been accepted at ordinary rates and 186% among those who had been charged an extra premium."

The Gotha Life Offices reported a mortality ratio of 168%, while the American experiences showed a ratio of 188% among those who had undergone two years' continuous treatment (a point Hutchinson always insisted upon), who had had one year's freedom from symptoms and who, being regarded as cured, were accepted as first-class lives.

My own knowledge of syphilitic disease and interchange of thought with others specially qualified to form an opinion make me unhesitatingly tell you that at present, in spite of all we have lately learned upon the diagnosis and treatment of syphilis, it would be most unjustifiable leniency to accept proponents in the earlier years after infection without a substantial rating up. No man who has had a Hunterian hard chancre, is ever to be regarded as quite as physiologically without blemish as those who have escaped such a far-reaching misfortune. This statement is for to-day not for the future, when, as is quite probable, a more excellent way of permanent cure has been worked out than we at present possess—therapy which may even penetrate to the fastnesses of the brain and so prevent the degenerative processes of which the ultimate results are locomotor ataxia or *dementia paralytica*.

I am most ready to admit that the Wassermann test has eminent uses in the diagnosis and outlook in syphilitic diseases, but I beg of you not to make a fetish of it nor regard it as an oracle which never errs. It has its place in the campaign against syphilis, but it is not an oracle whose indications are infallible. Moreover—and this is a very important point—do not be swayed unduly by the simple note "that a Wassermann has been carried out." The test is a delicate one which demands skill, practice and judgement and these qualities are

not found in everybody who can perform an alleged Wassermann test. Therefore, in appraising the value of the test, it is as well to know who did it, his ways and his results. Nevertheless, I will at least say this, that if it was done at all, it connotes trouble and solicitude on the part of the patient and probably means that he has had modern and efficient treatment. In some cases where the blood test is "negative" the cerebro-spinal fluid may be positive and the inferences as to prognosis different, for in such patients, if the test only concerned the blood and was "negative," one might accept the person as free of taint, whereas, if the cerebro-spinal fluid were examined and the result "positive," it would cause us to infer that the poison had affected the central nervous system. But surely nobody is going to expect that proponents are going to have lumbar puncture performed to satisfy the desires of a particular company; and so it brings us back to the fact that the Wassermann test is an adjunct to diagnosis, but in assurance practice at present it is not the main thing. However much we may call in these refinements of diagnosis, we must, in the rough ways of an assurance examination, rely mainly on a well-obtained history and the clinical signs in each individual case. However, let us admit freely that the test has its place, even in assurance practice, and after full consideration we have for the present in the Australian Mutual Provident Society's practice adopted the following general rules to guide our examiners in assessing risks in proponents whom we believe to have had a syphilitic infection. In these general rules, although I am sure that most men of experience will rely on a good history and a careful consideration of the clinical features of the case, we are ready to discriminate to a certain extent between those who have and those who have not got the added evidence of a Wassermann test.

There are three cases to be dealt with: (1) No test, (2) test "positive," (3) test "negative." We have also to consider (*i.*) persons known to have been efficiently treated, (*ii.*) those not known to have been so treated. We likewise naturally are helped by records of the evident care in examination, by the special recording of the condition of the cardiovascular system, pupillary changes, knee jerks *et cetera*.

We do not accept any proponent unless all signs and symptoms of activity of the disease are absent and three years have elapsed since the infection.

If then the case seems satisfactory, we advise as follows:

Time Elapsed Since All Signs and Symptoms Have Disappeared.	Wassermann Test.	
	No Test.	"Negative" Reaction.
3 years	Load 7 years	Load 5 years
5 years	Load 5 years	Load 3 years
7 years	Load 3 years	Take select
10 years	Take select	Take select

A test with a "positive" reaction is to be regarded as a sign and the proponent treated accordingly.



### Assessment Value in Certain Lives and Occupations.

In discussing this matter I feel that I am really going rather beyond my own proper work.

I have already told you in what way I regard the "taking select" without examination of children's lives in endowment assurances. I repeat, I think these proponents might well be medically examined or at least dealt with on their family history and physical development.

The general impression which my assurance experience has left on my mind is that, on the whole, premiums are more often too small than too large. However, the general success of assurance societies would indicate that they charge as a rule something near the correct assessment. It is, I suppose, in individual cases where inequality of assessment is apparent, not in big numbers. We penalize an albuminuric of thirty years of age, say, three or even five years. It is quite possible with all our care that he really may not deserve any loading; but if, as is not likely, he really has the beginnings of organic disease, then three or five years is a quite inadequate addition to cover the risk.

So also in glycosurics; we let them in because the sugar is an inconstant or temporary abnormality—at a loading, I admit—but, if all glycosurics are potential diabetics, I doubt if our small additions cover the risk in individual cases.

In these and many other cases which I have not mentioned, we load and either we should not load at all or our additions are totally inadequate to cover the real risk, if risk there be. They are simply pin-pricks to the proponent and a kind of soothing plaster to the doubts of the doctor and the actuary.

I think that we are often a little hard on proponents going to certain tropical regions. In past years these places may have been white men's graves, but improved sanitation and a knowledge of the prevention of tropical diseases have made them nearly as safe as the temperate zone. We are, on the other hand, I think, too easy with members of the theatrical profession. I know of statistical evidence that actors and actresses are not good risks. And, although I have no figures to prove it, I believe we may include persons who make a profession of music.

One last word about habits. We penalize and rightly so persons engaged in the liquor trade. We know all about the risks of that occupation, but it is in persons whose record of sobriety is doubtful that difficulty in assessment arises. The medical examiner may himself discover, by eye or nose, signs of the unwise use of alcohol. A sodden face, tremor, alcoholic breath, the sign of Quinquaud (a clinical point little known and in my judgement quite of use) or the grosser manifestations of alcoholic abuse. Such applicants present no difficulty; they are refused. It is in the cases where medical examination reveals no really adverse features, but the friends' reports are adverse or suggestive that the assessors are in doubt. Friends' reports are often misleading, intentionally or otherwise. Such terms "moderate drinker," "may take a glass," "a bit social," "a little elevated on his wedding day," are expressions provocative of suspicion and difficult

to appraise at their correct worth. One friend may be a teetotal extremist and think that one lapse or even three glasses on an occasion connotes perdition, while another thinks "getting drunk on one's wedding night" as quite the correct conduct for a bridegroom. Moreover, among the uneducated they often attach quite a different meaning to the words they use than the words themselves in cold print actually mean. I suppose their true meaning can only be gauged by the look and accent of the speaker. A shrug, a wink and the intonation of the voice, if the words were spoken, might alter the whole meaning of the statement.

In cases of doubt it seems to me futile to load up with pin-pricking additions. I think the wisest course in doubtful cases, where the best inquiries possible have failed to reveal the truth, is either to defer and sometimes do an injustice or to load on the lines of a publican's addition. If the proponent appeal, it will at least further clear up his personal record.

In small communities both friends and medical examiner alike are inclined to gloss over the failings of their fellow townsmen, so that, on the whole, I consider it safest to get reports from outside referees who are not personal friends of the proponents. This is, no doubt, a question on which a good deal may be said on both sides, but on the whole I fancy the greatest surety is found by employing the outside examiner.

And now, to conclude, I would have liked to talk to you of other matters of interest, of types of proponent—the careless, the untruthful, the meticulous and the conscientious idiot—of the bearing of bad teeth and oral sepsis on general diseases; why eye and ear examinations are important and some general considerations on the chances of longevity as they appeal to the medical examiner. I would also have liked to preach a little homily on over-indulgence in alcohol, food, tobacco or drugs and the detection thereof. But I am conscious of having already outrun a reasonable length for such a lecture as this.

### Reports of Cases.

#### STRANGULATED HERNIA IN AN INFANT.

By IAN McNEIL, M.B., B.S. (ADELAIDE).

Medical Officer, Pinnaroo Soldiers' Memorial Hospital, South Australia.

Mrs. E.W., aged thirty years, was confined on January 4, 1923. The presentation was occipito-posterior. Internal version was performed and the delivery was instrumental. There was brisk *post partum* hemorrhage.

On January 10, 1923, it was noted that the child did not drink properly and was fretful. On examination nothing abnormal was detected. The cord had separated. Circumcision was advised.

On January 11, 1923, a swelling in the right side of the scrotum was noticed. It was hard and gave no impulse when the baby cried, but it cried when the scrotum was palpated and drew up its legs. The child vomited at 10 a.m. curds and slightly greenish clear fluid; it also vomited at 11 a.m., the vomit being darker in colour and slightly offensive. An enema was given and repeated with no result.

The condition was diagnosed as a strangulated inguinal hernia and the contents of the sac as omentum. Immediate operation was advised. The condition of the child rapidly became worse. The temperature was  $39.3^{\circ}\text{C}$ . ( $102.8^{\circ}\text{F}$ .) and the pulse rate 148. Ether was administered by the open method. I made an incision 3.75 centimetres (one and a half inches) long over the tumour and exposed the sac. It was quite black and hard and indurated. It gave a slight sensation of fluctuation. The sac was freed from the surrounding tissue and it was then seen that it was a congenital inguinal hernia of the vaginal type. The sac was opened and blood-stained fluid under pressure squirted out. The sac contained about five centimetres of caecum and five centimetres of small gut and the appendix. The intestinal wall was of a very dark colour and the surface rough and covered with lymph. The appendix had the appearance of being the most acutely affected part of the contents; I therefore decided to remove it. As the condition of the patient was bad, I quickly enlarged the ring by snicking in a medial direction and replaced the rest of the contents, trusting that it would recover its vitality. A small, soft rubber tube was inserted in the ring to allow of adequate drainage and the wound sewn up, using interrupted sutures. No repair work was attempted. The child made an uninterrupted recovery, the tube being removed on the fourth day. He left the hospital on the eleventh day.

The unusual features, I considered, were: (i.) The age of the patient, (ii.) the quickness with which the baby recovered, (iii.) the finding of the caecum, small gut and appendix in the sac and (iv.) the difficulty in determining if drainage was necessary or not.

I am indebted to Dr. S. E. Hecker for the skilful way in which he administered the anæsthetic.

#### TUBERCULOSIS OF THE SKIN.<sup>1</sup>

By C. JOYCE, M.B., B.S. (MELB.),  
Perth.

I AM showing two cases of tuberculosis of the skin occurring in a woman, aged forty years, and her daughter, aged eight. On May 2, 1922, the mother consulted me about a lesion on the chin which had existed for several weeks. It was a large papule, covered by a crust. On removing the crust a drop of pus exuded. I regarded it as a staphylococcal infection and employed moist dressings, under which the lesion improved. The sub-mental gland, however, suppurated and was incised with considerable benefit. The patient then went for a holiday.

She was seen again on July 5, 1922. In the meantime the condition had been diagnosed as a tuberculous infection and several X-ray exposures had been employed. There was at that time a lesion on the chin about two centimetres in diameter, composed of several hard nodules, not showing the characteristic apple-jelly appearance. There was considerable thickening around the incision under the chin and it still discharged a little pus occasionally.

On the same date the daughter was found to have a papule on the cheek which had existed for three weeks. It was about one centimetre in diameter, raised, hard and covered by a scab. On the removal of the scab a little pus was seen. This pus was sent to the Government Bacteriological Laboratory and was found to contain tubercle bacilli in considerable numbers. There was an enlarged gland in the neck, the size of a walnut. A moist dressing was applied and both patients received their first dose of tuberculin. "T.B.E." was used in the dose of 0.00006 milligramme. As no reaction was noted, the doses were doubled every five days until 0.005 milligramme was given. A slight reaction then occurred. Since then the increase in dosage has been more gradual. The last dose was 0.05 milligramme of "T.B.E." and 0.05 milligramme of "T.R."

The child has shown steady improvement. The gland in the neck is much smaller, as is the facial lesion. The mother was not improving and her lesions were therefore excised two months ago. Since then she has reacted slightly to the tuberculin. The general health of both patients is unimpaired.

<sup>1</sup> Read at a meeting of the Western Australian Branch of the British Medical Association on November 15, 1922.

The mother's recovery appears to be complete. The lump in the neck of the daughter has resolved into two hard lumps about the size of peas. The face lesion has lost the deep induration, but over an area just covered by a shilling are several lesions like large black-heads. Her general condition is good. The tuberculin was continued until 0.8 milligramme of "T.B.E." was administered twice to each patient. I am sending the girl for a few exposures to ultra-violet rays, which it is hoped will clear the condition.

A possible source of the infection is the husband of the woman. Eight years ago he suffered from pneumonia, which resolved very slowly and was followed by a pleural effusion. The fluid was removed several times. These cases often prove to be tuberculous. No definite evidence of the tuberculous nature of this illness was available in the case of the husband, though he is still suspect of tuberculosis in a latent condition.

### Reviews.

#### MEDICAL SERVICE IN WARFARE.

LIEUTENANT-COLONEL M. A. W. SHOCKLEY, of the Medical Corps of the United States of America Army, has written a book on the medical service of an army.<sup>1</sup> It is in a convenient form, is compact, easy to read and well planned. Loose diagrams are collected in a pocket at the end of the book and can be taken out and unfolded for ready illustration of the text. The author claims that the tactical and administrative doctrine on which the medical service of the United States Army is based has been coordinated with the "combatant doctrine" by actual test at the General Service School. It has been found to conform to the doctrine of the Surgeon-General's Office. Although this service differs from the Australian Army Medical Corps in certain important details, the book should be of interest and value to all members of the Australian Army Medical Corps and also to medical practitioners generally. One of its uses will be the help it offers to those responsible for the welfare of large numbers of men collected in confined areas. The question of sanitation is well and clearly described. Statistics of the battle casualties of various nations are tabulated in an interesting manner.

### Notes on Books.

#### THE QUEEN OF NEW CAMBRIA.

EVERY beauty spot of the old world has given birth to dreams of romance and of visionary lore in the breasts of those who see and understand. Legend has a deep meaning to the dwellers on the banks of a glorious river or on the summit of a snow-peaked mount. Those who know and love each changing phase of Nature in some heaven-blest corner of the earth, let fancy reign and see an elfish sprite or some god-like form where strangers see but trees. "Kurwabubula" has peered deeply into the coves and shores, the nooks and crannies of Sydney Harbour and has dragged her secrets from her tender breast. He has given us a booklet of short stanzas<sup>2</sup> on some of the fairy aspects that are revealed only to those whose spirit of romance unlocks the door to fairyland and to the kingdom of mermen and mermaids. On the cover is a fine reproduction of one of Conrad Marten's masterpieces, a view of the wonderful banks and waters. On each page is a delicate phantasy of more than usual merit, a dedication to the Harbour's incomparable charm. He who loves her varying moods and seeks her unfailing solace, should read this delightful collection of sonnets.

<sup>1</sup> "An Outline of the Medical Service of the Theatre of Operations," by M. A. W. Shockley, Lieutenant-Colonel, Medical Corps, United States Army; 1922. Philadelphia: P. Blakiston's Son & Company; Post 8vo., pp. 230, with eight detached diagrams of field operations. Price: \$2.50 net.

<sup>2</sup> "The Queen of New Cambria," by "Kurwabubula"; 1922. Sydney: Angus & Robertson, Limited; pp. 18, with a coloured illustration on the cover. Price: 1s. 6d.

## The Medical Journal of Australia

SATURDAY, MARCH 3, 1923.

### Laboratory Aids to Diagnosis.

THE FEDERAL COMMITTEE OF THE BRITISH MEDICAL ASSOCIATION IN AUSTRALIA recently considered an extremely difficult question in connexion with the rôle of the expert bacteriologist and pathologist. Modern medicine demands that the first duty of the medical practitioner is to ascertain with exactness the nature of the affection from which his patient is suffering. He must call to his aid all the ancillary means of diagnosis and he must accept the full responsibility for the correct interpretation of all indirect signs of disease. The ordinary practitioner cannot render himself expert in all the special branches of medical practice and consequently he is frequently compelled to collaborate with specialists in order to elucidate the state of particular organs or functions of the body. It is usually unwise for the general practitioner to rely on his own judgement in an examination of the eye, the ear or the larynx. He has seldom the facilities or the technical knowledge necessary for preparing a skiagraph and for interpreting the shadow picture. Similarly he seeks the assistance of the bacteriologist, the biologist or the pathologist when he requires information concerning bacteria present in a body fluid or excretion, the biological qualities of the body fluids or the nature of a neoplasm. When a medical practitioner seeks the aid of his colleague, he divides his responsibility and utilizes the information conveyed as a result of the special training and experience of the latter. Unfortunately, it has become a common practice for the attending practitioner to regard some of the specialists to whom he turns for help, as sources of detached information instead of as consultants. The radiologist and the ophthalmic surgeon recognize the necessity of coordinating the information derived from their special examinations with that revealed by ordinary examination. The attending practitioner often

neglects to meet the radiologist or eye, ear or throat specialist and may not even send a letter giving all the information concerning the family and personal history, the general physical examination and the clinical course. When this method is pursued, the value of the collaboration is restricted. Many practitioners have realized the truth of this and endeavour to derive the utmost advantage from the knowledge and experience of the specialist by discussing the patient's condition with him. In what is known as "team work" the attending practitioner consults with several specialists and then coordinates the facts disclosed and opinions elicited as a result of these consultations.

In the case of the laboratory worker—the bacteriologist, the chemist, the bio-chemist and the pathologist—the usual method is even more faulty. A specimen, be it a tube of blood for a serum test, or a sample of urine, or some pus, is sent to the laboratory, accompanied by a request for a report. Often the request is a limited one, as, for example, the request for a report on the result of a Wassermann test. The medical practitioner in the laboratory is not told anything about the patient, his illness or the reason for the examination. Moreover, the specimen is not infrequently collected and transmitted in unfavourable conditions, so that the result of the laboratory examinations is rendered more or less useless. It is of fundamental importance, if the medical practitioner desires to take advantage of modern achievements in the laboratory, that he shall regard the bacteriologist, biologist and pathologist as consultants with whom he should discuss every aspect of the patient's condition before any tests are carried out. Under these conditions the medical practitioner trained and experienced in immunological, bacteriological and pathological work can share the responsibility with the attending practitioner and the result of their combined endeavours will be greatly to the benefit of the patient.

Laboratory work consists to some extent in routine, tedious manipulations which can be adequately performed by a trained technical assistant under supervision by the responsible practitioner. In the operating theatre, in the plaster room, in the electrotherapeutic department and elsewhere unqualified assistants are employed to carry out duties demand-



ing mechanical skill. The assistant is not permitted to perform any manipulation for diagnostic purposes without the closest supervision and control of the responsible practitioner. The laboratory assistant is employed in somewhat similar circumstances. He usually starts as a washer of glassware and a real assistant in experimental and other work. In the course of time he acquires manipulative skill and dexterity, often superior to that of his employer. He may become an expert glass blower; constant practice may render him reliable in titrating a fluid or in fixing, hardening, imbedding, cutting and mounting a pathological specimen for microscopical examination. In some laboratories it is recognized that there is a serious disadvantage attached to the continued training of laboratory assistants, since, at best, they remain mechanics and, in view of their lack of general medical education, they cannot exercise the essential judgement required for the recognition of pathological conditions in human beings. The qualified practitioner trained as an immunologist relies on his knowledge of the physiology of the human body and its organs and on his acquaintance with the biological behaviour of tissues and organs to pathological processes to guide and check him in carrying out biological tests. If he has access to the patient, as he should have, and is informed concerning the patient and the clinical course of the illness, he can render valuable service in discovering the real nature of the illness. The technical assistant can never replace the qualified practitioner for the purpose of consulting with the attending practitioner.

It so happens that bacteriologists, biologists and pathologists are compelled by the circumstances of their work to utilize the services of their assistants in the routine work connected with many laboratory tests. The assistant often prepares the hæmolytic serum, the suspension of red blood corpuscles and the syphilitic antigen or its substitute for the Wassermann test. Whether he should be allowed to standardize the inactivated serum for complement or not is a moot point. He frequently is required to make the dilutions and to put up the controls and in this his employer at times does not exercise any direct supervision. It is held by the majority

of bacteriologists that the determination of the presence or absence of a reaction must be undertaken by the person signing the certificate. Since the certificate is valueless if signed by an unqualified person, the employer who affixes his signature to a certificate recording the result of a biological test without having supervised the application of the test or at the very least without having satisfied himself by personal examination of the end result that the reading is accurate, is party to a wrong action. The Federal Committee is disposed to interpret such an action as an instance of "covering," as defined in the "Warning Notice" of the General Medical Council. Bacteriologists who delegate their responsibilities to unqualified persons, are injuring the profession to which they belong, since the expedient of registration has been designed to distinguish between responsible practitioners who have undergone a prescribed course of training and have passed the prescribed tests and unqualified persons whom the law does not recognize as competent to practise medicine.

It is necessary to make certain reservations in this interpretation of the "Warning Notice." Pathologists qualified in veterinary medicine, graduates in science and a few others have studied bacteriology and immunology and have acquired a considerable amount of knowledge and experience in this department of medicine. It is, of course, excluded that such persons could consult with registered medical practitioners, for the General Medical Council has definitely laid it down that this would constitute infamous conduct in a professional respect. If it is held that the bacteriologist and pathologist should collaborate with the attending practitioner as a consultant in order to render their work of real value to the patient, even these persons should not be permitted to undertake the work. But no one can forget that Pasteur himself was not a medical practitioner. While it may be difficult to escape from this dilemma, comfort may be derived from the fact that there have been but few non-medical bacteriologists and pathologists of eminence. For the rest, it is in the interest of the community that medical bacteriologists should exercise great care not to delegate their responsible duties to unqualified persons.



### "THE LANCET'S" HUNDREDTH BIRTHDAY.

ON October 5, 1823, the first issue of *The Lancet* was published. Thomas Wakley, a young practitioner of twenty-eight years, was its plucky and fearless founder. The issue of January 6, 1923, contains a leading article, in the course of which the objects, methods and achievements of the founder of *The Lancet* are set forth in a very interesting manner. It may come as a surprise to medical practitioners of to-day to learn that this very young man was sufficiently ambitious and courageous to include in the scope of his newly established journal a complete chronicle of current literature, not current medical literature, be it noted. The first issue contained a leading article entitled "Politics," an article obviously characterized by an out-spoken, perhaps somewhat rash attack on the younger Pitt and Radicalism. *The Lancet* has long since abandoned the attempt to include politics and general literature in its survey. It is not impossible that the early daring of the elder Wakley proved expensive, even if it was attractive and contributed to the popularity of the publication. In the early days the paper comprised thirty-six small pages, approximately equal in size to a demy octavo of modern times. To-day *The Lancet* contains between fifty and sixty pages of reading matter and over eighty pages of advertisements, the size of the page being Imperial quarto. Thus "Great floods have flown from simple sources." A hundred years ago the cleverness of an energetic and enterprising young man laid the foundation for a great instrument of medical education which yields an enormous influence and helps to mould the hygienic and medical destinies of the United Kingdom. *The Lancet* has initiated countless reforms by powerful advocacy and the weight of sound argument. Its policy has been fearless, honest, honourable and unflinching for one century. It has set itself numerous tasks to direct the attention of the medical profession and of the public to social defects and to problems demanding solution. Always it has succeeded in beating down prejudices in the course of time, often in the face of strenuous opposition. The record of this great organ is a magnificent one, for its leaders have been zealous of the honour and integrity of the medical profession.

Medical journalism in the British Empire resides

in *The British Medical Journal* and *The Lancet*. This fact has long been recognized by the public at large, as well as by the medical profession. Both journals are read by the intelligent non-medical public in clubland, in literary circles and in the political world. It is true that *The Lancet* no longer delivers itself of views on national and party politics, nor does it essay the hopeless task of reviewing the world's *belles lettres*. Each successive editor has contributed largely to the achievements of *The Lancet*. The present editor still compels attention in regard to medico-political problems and his facile pen delights his readers when he turns his thoughts to literature which has some relation to medical subjects. During the war years the value of the work of the editor became even more evident than it had been. In 1921 both the editor of *The Lancet* and the editor of *The British Medical Journal* received the honour of knighthood in recognition of their great services to the medical profession and to the Empire. This act was at the same time the first official acknowledgement of the status of medical journalism.

The leading article in *The Lancet* of January 6, 1923, contains in its closing passages the following sentence: "It is more fitting that we should acknowledge a genuine feeling that nothing in those early days could have been done by this paper, as nothing can be done by us now, without the cooperation, intimate help and valuable criticism of our public."

We would ask our own readers to realize that the beneficial influence that this journal may exercise within the Commonwealth, must likewise depend on their cooperation, intimate help and valuable criticism.

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### Current Comment.

#### BENZYL BENZOATE AND NITROGENOUS METABOLISM.

THE popularity of benzyl benzoate as a therapeutic agent dates from 1916, when Macht investigated the action of the different alkaloids of opium. These alkaloids may be divided into two main groups. The pyridin-phenanthrene group, including morphine as its most important member, is quite distinct from the benzyl-isoquinoline group, to which papaverine belongs. Macht found that the members of the first group stimulated unstriated muscle to

contract and increased tonus, while the members of the other group inhibited contractions and lowered tonus. In combinations of members of the two groups the benzyl-isoquinoline group exerts the predominating influence. Macht endeavoured to discover simpler groupings of the benzyl radicle that would produce the same therapeutic effect. The two esters, benzyl benzoate and benzyl acetate, fulfilled this condition.

When these esters are introduced into the body they undergo hydrolysis and the therapeutic effect is in proportion to the rate of the hydrolytic change. Macht showed that the benzyl esters were excreted largely in the form of hippuric acid. It is held by many that benzoic acid is formed during the process of conversion into hippuric acid. The various phases of the action of these drugs have been studied by many observers.

Among the more recent to do so are Dr. George T. Pack and Dr. Frank P. Underhill.<sup>1</sup> These observers have estimated the influence of benzyl benzoate on nitrogenous metabolism. Their experiments were conducted on normal fasting dogs. The volume, specific gravity and total acidity of urine, as well as the hydrogen-ion concentration, were determined. In addition, the creatin, creatinine, total phosphate and total nitrogen contents were estimated. In the first place experiments were carried out on normal fasting dogs in order to lay down a standard of normal metabolism for a period similar to those of the subsequent experiment. During a period of eight days of starvation the loss of weight was gradual and constant in the two dogs observed. The titratable acidity and the hydrogen-ion concentration of the urine maintained a parallel and a constant with little variation. Total nitrogen excretion also remained constant. The total phosphate content of the urine gradually increased in one animal and in the other there was considerable variation before a final drop. Drs. Pack and Underhill point out that in this respect they differ from Lusk, who found an increase in phosphate excretion during starvation. Hawk found that there was a decrease. The creatinine elimination was not altered during the fast. Creatine elimination, which in normal dogs is very slight, was increased during starvation. This is in accord with the findings of other observers. A small dose of benzyl benzoate was given to two dogs. The dose used was 0.5 cubic centimetre per kilogram of body weight. No toxic symptoms were noted. The volume of urine was not increased beyond that caused by the increase in fluid intake. Drs. Pack and Underhill conclude that the benzoate was entirely converted into hippuric acid. The most remarkable change recorded was the fact that a definite creatinuria was induced. A moderate dose (one cubic centimetre per kilogram of body weight) was next given to another series of dogs. Loss of weight and volume output of urine were not modified in any way. The hydrogen-ion concentration was increased slightly in one instance. The titratable acidity was increased considerably in each animal. This was concurrent with an increase

in the output of phosphates. The increase in acidity was ascribed to acid phosphates. The total nitrogen excretion was augmented. Reduction tests, which were made in some instances, showed that glyconuric acid was excreted in each instance. Moderate and large doses of benzyl benzoate led to an increased excretion of creatinin. It has been shown by Benedict and Osterley that the dissociation of creatinin is dependent on the utilization of carbo-hydrate. There is, however, much difference of opinion concerning the mechanism of the accumulation of creatinin in the urine. The authors are satisfied that the inhibition of the carbo-hydrate metabolism is one of the most important factors of the creatinuria after the absorption of benzyl benzoate and that there is little evidence to support the view that the elimination of an excess of creatinin is the result of muscle proteolysis. They suggest that benzoic acid, by virtue of its hippuric acid formation, may cause a profound disturbance of the sugar metabolism with an elimination of glycocholl. The removal of glycocholl from the large protein molecule may cause partial disintegration of the molecule. They suggest, further, that in such a case the products of disintegration might not be those of normal and complete proteolysis, but that such bodies as creatine might be produced. The results obtained by giving a large dose of benzyl benzoate to starving dogs (the dose was two cubic centimetres) did not produce a result different in any material respect from that of the preceding moderate dose.

In discussing these experiments, Drs. Pack and Underhill conclude that the ingestion of benzyl benzoate brings about an increased catabolism, that this increase is not due to a stimulation of normal activity, but that it follows a toxic decomposition of body protein. This breaking down is probably due to the acute demands for conjugation by benzoic acid. In this way the metabolic action of benzyl benzoate is due to the benzoic acid formed rather than to the benzyl radicle itself. In regard to the effects of the different doses, they conclude from their experiments that the therapeutic dose for human beings is probably insufficient to disturb normal nitrogenous metabolism.

#### THE FAT-SOLUBLE A AND THE ANTI-RHACHITIC ACCESSORY FOOD FACTOR.

ACCORDING to McCollum, the accessory food factor, usually termed fat-soluble A, is distinguishable from the accessory food factor associated with the prevention or cure of rickets. McCollum and the majority of the workers on the physiological action of food constituents have accepted the doctrine that the effect produced by milk, cod liver oil and vegetable fats on the rate of growth of young animals is referable to a definite substance, although all attempts up to the present to isolate this substance have failed. Several years ago Kasimir Funk thought that he had separated the anti-beri-beri vitamin and even dared to subject the matter alleged to be pure vitamin B to elementary chemical analysis. Repetition of these experiments soon re-

<sup>1</sup> *The Journal of Metabolic Research*, July, 1922.

vealed that his conclusions were quite untenable. There is much evidence to show that the vitamin action is produced by something that is practically intangible, just as the phenomenon of enzymic action is traceable to an elusive and apparently imponderable something associated with globulin. Whether the vitamins are real substances or merely qualities of some complex molecules which can be manifested as specific stimuli on certain functions of living cells, cannot be determined at present. The possibility that there is no such substance as a vitamin and that growth, for example, is conditioned by the presence of chemical stimulation of the tissues of young animals should be borne in mind, when the question of the identity of two vitamins is questioned. It has been noted that rickets in infants and in rats can be cured by the exhibition of cod liver oil and by exposing the infant or rat to the rays of the mercury vapour quartz lamp and, further, that in both rickets can be prevented by these measures, even when the diet is deficient in the anti-rachitic vitamin. Several investigators have noted that rats fed on diets deficient in vitamin A and exposed to the rays of the mercury vapour quartz lamp or to other light rich in ultra-violet rays gain in weight while the controls remain at one weight level. The workers at Vienna, including Miss E. M. Hume, Miss Chick, Miss Dalyell, Miss Mackay and Miss Henderson Smith, thought that this action of ultra-violet rays might serve to settle the question of the identity or otherwise of the fat-soluble A and the anti-rachitic accessory food factor. At the same time, Dr. H. Goldblatt and Mr. K. M. Soames instituted similar experiments to corroborate or check the results of their colleagues at the Lister Institute.

Miss E. Margaret Hume<sup>1</sup> started by selecting two rats from each of three litters and feeding them on a carefully prepared diet deficient in fat-soluble A food factor. One rat from each litter was exposed to the rays from the mercury vapour quartz lamp, placed eighty centimetres from the animal, for five and ten minutes every second day. The second rat from each litter served as control. The three rats that had been exposed to the rays, grew well for a period of from thirty-five to fifty days, while the control rats grew normally for from seven to ten days. Growth ceased in the former after a period of slowing down and between the fiftieth and the sixtieth days signs of rhinitis, xerophthalmia and other evidence of vitamin deficiency appeared and soon became severe. The growth of the control rats continued at a very low level for about seventy-two days. It was noted that the control animals refused their food after a varying time. Recovery took place when a diet of bread and milk was substituted. The second series was handled in a somewhat different manner. Eight rats were kept for ninety-one to one hundred and fifty-eight days on the deficient diet before they were exposed to the rays of the mercury vapour quartz lamp. It is stated that the growth of these rats had long been stationary. Full information is not given, but it would seem that these rats took their

food; none of them are stated to have starved. The result of the exposure to rays was little or none. A third group was treated with exposure to rays when the growth had ceased for about ten days. In these animals the growth immediately gave a spurt and continued at a rate approaching the normal for over fifty days. When the irradiation was delayed to the thirty-fifth day, renewed growth was less prolonged and less extensive, although the rate at first seems to have been relatively rapid.

Miss Hume interprets these experiments on the basis of vitamin A being a tangible substance. She supposes that there is an interaction between the fat-soluble A food factor and ultra-violet rays, but that the rays do not produce a photo-synthesis of the vitamin. She supposes that when the deficient diet is instituted, there must be a store of vitamin in the rat's body, some of which is utilized for growth during the first few days. Later very little becomes available and growth almost ceases until the store is used up and the animal is affected with xerophthalmia, wastes and dies. She holds that under the influence of the mercury vapour quartz rays the vitamin is economized and growth takes place at a normal or nearly normal rate for a considerable time. Ultimately, however, the supply becomes exhausted and then the condition of the animal is the same as that of the control rats at the earlier period.

Dr. H. Goldblatt and Mr. K. M. Soames<sup>1</sup> followed the same methods with slight variations and noted a similar temporary period of growth in response to the irradiation. These observers kept their rats in the dark, but otherwise the conditions of experiment did not differ materially from those of Miss Hume. While the results of the experiments coincided in the main, the difference between the rate and amount of growth of the rats exposed to the rays from the mercury vapour quartz lamp and the rate and amount of growth of the control rats was far less in Dr. Goldblatt and Mr. Soames's series. They also regard the rays as agents capable of economizing the store of vitamin A in the rat's body.

There are some weak points in the conclusions of these observers. In the first place, it is stated that the control rats did not eat their full allowance of the diet. Whatever change is effected within the body by the stimulation of the vitamin-containing substance of a normal diet, this must of necessity fail to maintain growth when the caloric requirements are not covered. In the second place, it is highly probable that growth is primarily dependent on the protein, carbohydrate, fat, salt and water content of the diet and that the vitamin action is that of a regulator or liberator of energy. If the tissues require a stimulus in order to utilize the fuel supplied for growth, it would be improbable that a physical stimulus could conserve the chemical stimulus and cause it to go further than usual. There is no necessity to postulate a synthesis of the vitamin. It would be more probable that the physical stimulus would act as an incomplete substitute for the chemical stimulus.

<sup>1</sup> *The Lancet*, December 23, 1922.

<sup>2</sup> *Ibidem*.



## THE RUSSIAN FAMINE.

HISTORY in the popular sense represents a record of events interspersed by comments on the causes and effects of these happenings and by guesses concerning occurrences of which no accurate record is available, adapted by the historian to suit his national or personal views. The child at school is expected to accept the record of events of past ages according to the nationality or religion of his teachers and is influenced to regard all other versions as intentionally warped and untrue. The history taught to British children differs essentially from that taught to Chinese, American, French or Russian children; the history of the Protestant school does not coincide with that of the Roman Catholic, the Jewish, the Mohammedan or the Confucian school. Time does not alter this state of affairs, for past history is based on the accounts supplied by persons living at the time and these accounts are never impartial and objective. Even the record of a person belonging to an uninterested nation or community cannot be trusted, for it is a trait of human nature to take sides and to allow sympathy to influence judgement. The contemporary history of the Russian people is, perhaps, the most unreliable the world has ever known. Independent visitors to Russia during the past five years have viewed a few events of greater or less importance within a very small section of a vast and complicated country and have endeavoured to judge a strangely confusing political situation without a full knowledge of the attendant circumstances. It is impossible to understand a social or political situation unless full information be available concerning the character, the mental attitude, the degree of enlightenment and the social life of the people. This means the people of every stratum of society, from the least educated to the most highly cultured. One of the difficulties encountered at present in assessing the Russian situation at its proper value is dependent on the suppression of the cultured class, the educated Russian of a few years ago, who ranked among the best informed and most gifted people of the world.

Reference has been made in this journal on several occasions to the action of the International Red Cross Committee and the League of Red Cross Societies in regard to the famine conditions in Russia. We have no concern with the causes of the famine, beyond the mere fact that it arose in the wake of war and attacked a frugal, industrious, albeit uneducated peasantry. In August, 1921, a conference of these two powerful philanthropic organizations with the representatives of twelve governments founded a committee, called "The International Russian Relief Committee." Dr. Fridtjof Nansen was appointed High Commissioner and was given wide powers to organize the work and to coordinate the assistance rendered by other organizations. One of the first actions taken by Dr. Nansen was the conclusion of an agreement with the Soviet authorities. This provided for the right of the International Russian Relief Committee and its constituent societies to enter Russia and to carry out their

activities without interference. The Committee acquired power to employ Russian assistants and to establish offices in Russian territory. Dr. Nansen made a personal appeal for funds to render his campaign possible. He visited many European countries for this purpose and his efforts were supplemented by appeals issued through the medium of the various Red Cross Societies and other philanthropical bodies. The total amount collected in this way up to August 31, 1922, was nearly 3,200,000 francs. It is interesting to note that Great Britain's contribution was the largest and amounted to over 610,000 francs, while Spain came second with 583,000 francs. Norway, Switzerland, Egypt, Holland, France and the Holy See all contributed over one hundred thousand francs. Six further nations contributed over ten thousand francs each. Australia sent 4,200 francs, while Cuba, Japan and Sweden also gave sums exceeding a thousand francs. The smallest contributions came from Serbia, Germany and Austria and were less than a thousand francs.

On August 15, 1922, no less than 1,400,000 people were being fed as a result of this international undertaking with Dr. Nansen as its organizer and active spirit. In September, 1922, it was decided that Dr. Nansen should be invited to pursue his work in Russia under the designation of "The Nansen Mission." The Committee came to the conclusion that the High Commissariat possessed sufficient authority to act as an independent organ. The Committee expressed its profound gratitude to Dr. Nansen for his extraordinary work. His energy, high convictions and authoritative speech had succeeded in inspiring a movement of magnificent generosity, with which his name would be permanently associated.

These details are given in order to indicate the nature of the organization which penetrated into the famine areas of Russia. It is clear that the men and women of single purpose, of unusual intellectual and practical qualities and of unimpeachable integrity, working with Dr. Nansen, are likely to be reliable records of fact. Simultaneously the American Relief Administration, an organization founded by Mr. Herbert Hoover, worked independently of Dr. Nansen's organization, although the most cordial relations were maintained between the two bodies aiming at the same goal. We are therefore inclined to present the facts as described by the workers in the affected areas as reliable. History compiled in this way is unusual.

In the year 1921 there were notified 579,000 cases of typhus fever, 683,000 of recurrent fever, 332,000 of typhoid fever and 174,000 of cholera in Russia. In the Volga Valley the case mortality of these diseases and of tuberculosis and similar infective processes was 30%. In 1922 governmental assistance to the Russian medical institutions was withdrawn, with the result that half of them had to be closed. The mortality among nurses and hospital personnel was between 10% and 12%, while it was between 15% and 22% among medical practitioners. In Kharkoff Province forty-seven out of two hundred



and sixty-three doctors were stricken with typhus fever. In Ukraine no less than 615,810 cases of infective disease were notified during the first six months of 1922. These included 229,828 cases of typhus fever and 226,475 of recurrent fever.

Miss N. Hill, attached to the League of the Red Cross Societies, publishes a descriptive account of the situation in the famine area.<sup>1</sup> At Syzran Station, on the Siberian railway line, she encountered a great crowd of refugees. A boy was lying on the platform dying of typhus fever, but no one bothered. Death from typhus had become so common that its occurrence no longer aroused horror, compassion or even interest. The children are described as pitiful little objects with sunken cheeks, wrinkled foreheads and empty stomachs, old before they cease to be babies. In 1921 about one-third of the inhabitants of Buzuluk, in Samara, died of starvation and disease, while the remainder or the majority would have died, but for the timely intervention of the Society of Friends. Thanks to this aid, Buzuluk had become a town again. It is true that many of the wooden houses were empty; others were crumbling and out of repair. But there were people capable of working again and even one or two shops. The international relief had wrought a miracle.

The harvest was poor, for there was scarcely any seed. Miss Hill is emphatic in her fears for the following season on this account. Her mission took her about forty miles beyond Buzuluk, where the peasants had literally nothing. Asked what they needed most, they replied: "Bread!" They had no horses for ploughing, they had no seed for sowing, they had no clothing, they had no fuel for the cruel, bitter winter; but, above all, they had no food; they needed bread first of all. The children, with swollen bellies, shrunken skin and bony limbs, were relatively easy to handle. With regular food supply they became almost normal. The Soviet authorities had provided children's "homes." Miss Hill repeats the word in scorn, for these asylums, with few bedsteads, without blankets or sheets, harbouring children wrapped in rags to protect them from the extreme cold, had nothing in common with home. The children had forgotten how to play. They sat cowering on a bed or on the floor, without pictures, books, toys or even a pencil. Miss Hill tempted them into the sunshine and, if we may read a sentence that does not appear in her account, brought sunshine into their little lives. There was one hospital in the district, with one woman doctor and four peasant nurses. The accommodation was limited, since there were but thirty beds. Patients with typhus fever often had to be refused admission, even after a long, weary drive in a rough peasant cart. Malaria was wide-spread and severe, while cholera was relatively infrequent. The supplies available sufficed only for a part of the population. It is plain from Miss Hill's record that these peasants are prepared to make great sacrifices, that the mothers accept the inevitable and are will-

ing to die without complaint, but move heaven and earth to give food to their children. The straw of the thatched roofs has been eaten, when other grasses were exhausted. And then the peasants waited for the end.

The experience of the American Relief Administration throws a lurid light on the extent of the misery resulting from the famine. It appears that the organization relied on information collected in advance by Russian couriers engaged for the purpose, in order that the relief trains might be sent on, adequately equipped to meet any existing situation. These couriers were apparently heroic, staunch and unflinching in duty. Of every three, two would find their way during the winter into hospital, victims of typhus fever, caught on the vermin-infested trains. The couriers carried on, notwithstanding the frequency of blizzards holding up the trains, the delays caused by the chaotic mismanagement of the railways and the annoyance of having their tickets and orders stolen by pick-pockets on nearly every journey. Trains became death traps, because persons died of typhus fever and the infected lice crept from the dead bodies on to the bodies of the living. From time to time the trains were stopped and the dead were removed. There were time-tables issued by the Soviet authorities and notices posted at the railway stations. The information concerning the time of departure and destinations of the trains did not coincide in these documents. The trains, however, started when they liked and their destination could only be ascertained by those travelling in them. At times the train would be a passenger train; on the next trip it consisted exclusively of goods waggons, which became highly uncomfortable when crowded by refugees with their unsavoury baggage. At times the couriers, weatherbound for a week or more, were compelled to sell their underwear to buy food. It is stated that, notwithstanding the constant risk of typhus fever, notwithstanding the high mortality and the other risks attached to their duties, not one courier complained or asked to be transferred to less perilous work.

In Moscow school children and medical students had to be assisted to live. Over four thousand were receiving a daily dinner in the kitchens of the American Relief Administration. Assistance was urgently needed by the medical students, especially during the examination period of the year. Other students were able to earn something while attending their university classes, but the medical students found it impossible to do this without postponing their examinations. Of course, many were compelled to interrupt their student careers. The assistance was primarily intended for the men approaching their final examinations, as Russia is seriously in need of medical practitioners. Students of the earlier years and school children in the lower classes could not be helped, much to the distress of those in charge of the work. It was held to be essential to give preference to the senior students and school-boys, so as to expedite their entry into the service of their country.

<sup>1</sup> *The World's Health*, October, 1922.

## Abstracts from Current Medical Literature.

### DERMATOLOGY.

#### The Mycotic Nature of Pompholyx.

S. S. GREENBAUM (*Archives of Dermatology and Syphilology*, December, 1922) points out that Darier published an article on vesicular and vesico-pustular eruptions of the hands and feet. The majority of these eruptions corresponds to the classical description of pompholyx. *Mycelia* were found on microscopic examination and he came to the conclusion that 80% were mycotic in origin. Sabouraud, on the other hand, is of the opinion that pompholyx is not of mycotic origin, although there are pompholyx-like lesions that are. This author concluded that a disease should not be regarded as mycosis because of the microscopic findings alone, as fragments of mycelium may be found living as saprophytes on the skin. He claimed that cultures were necessary as additional evidence. With the opinions of these two authorities diametrically opposed, it was thought that the matter could be approached from a different point of view. With this object in view, S. S. Greenbaum attempted to settle the matter by means of inoculation, auto-inoculation and serologic tests. Typical instances of pompholyx were selected (cheiro-pompholyx of Hutchinson, dyshidrosis of Tillbury Fox). As the results of these tests were inconclusive, the author expresses the opinion that pompholyx is a clinical entity whose cause remains unknown. When well defined, ringworm as an aetiological factor can be clinically excluded. He has encountered poorly defined or aborted cases of pompholyx, the differentiation of which from the pompholyx-like lesions of ringworm required microscopic and cultural examination. Pompholyx-like eruptions occurred which have a mycotic origin.

#### Exfoliative Dermatitis.

DAVID LEES (*British Journal of Dermatology and Syphilis*, November, 1922) deals with exfoliative dermatitis following on the administration of arseno-benzol and its derivatives. Of 4,500 patients suffering from syphilis who were treated with "606" and "914" compounds, ten were found by the author to have exfoliative dermatitis. Mercury had been administered into the muscles at the same time. The main aetiological factor of this form of dermatitis appears to the author to be the presence of a slight degree of seborrhoeic dermatitis. The nature of the compound used appears to have some aetiological bearing. The "606" group is more likely to cause exfoliative lesions than the "914" group. The simultaneous administration of mercury and arsenic is less frequently followed by this affection. The author quotes Shamberg in support of the contention that when the drugs are administered alternately dermatitis is rarely produced. Among other aetiological factors, the condition of the patient and the possibility of

pathological complications, such as nephritis, are mentioned. Alcoholics are especially liable to be attacked. Exposure to cold is also likely to intensify the attack. The treatment is prophylactic and abortive, the former requiring a thorough examination of the patient and a mastery of the technique of the injections. The abortive treatment consists of venesection and the administration of "Intramine," three to five cubic centimetres every third day.

#### Erosio Interdigitalis Blastomycetica.

JAMES MITCHELL (*Archives of Dermatology and Syphilology*, December, 1922) reports an instance of yeast infection of the hands. The infections hitherto reported by German authors were characterized by the appearance of a superficial, red, shiny lesion, situated on the web of the finger, usually in the third or fourth interspace. It is said to occur in women who wash clothing or have their hands in water in the course of housework. The disorder has not been observed in children. Neither vesication nor lymphangitis occurs in this affection. On microscopic examination a double contoured yeast has been discovered. Inoculation with this yeast of the interdigital surfaces was successful in several instances. In the author's patient none of the usual methods of treatment appeared to influence the course of the disease. Whitfield's ointment, chrysarobin, iodine, salicylic acid were all tried without effect. Apparently laundry work was the most important aetiological factor, as the patient recovered when she gave up this work. The author thinks that the term *blastomycetica* is confusing, as it may lead to the supposition that the causative organism is the blastomyces. He suggests the substitution of the term *saccharomycetica*.

#### Molluscum Contagiosum.

JACKSON CLARK (*Proceedings of the Royal Society of Medicine*, November, 1922) claims to have discovered flagellate bodies which are closely associated with the molluscum body. These have never been seen in the fresh specimen, but make their appearance after the fourth day. They have a roundish head, about the size of a red blood corpuscle, and a single powerful flagellum. He proposes to call this parasite *Plassomyxa contagiosa*.

#### Treatment of Arsenical Dermatitis.

J. E. R. McDONAGH (*The Medical Press and Circular*, September, 1922) maintains that arsenical dermatitis is the most troublesome to handle of all the complications which may follow the use of arseno-benzene, as it frequently becomes secondarily infected with pyogenic organisms. These may cause a fatal termination, death being due either to broncho-pneumonia, to meningitis following on a wide-spread septic condition or to damage to the lining endothelium of the capillaries of an important viscus by the action of the arsenic. The damage caused by the arsenic would result in hæmorrhage into the kidney, brain or liver. In the acute stage he recommends the application of an antiseptic, evapor-

ating lotion with oil of eucalyptus added, if the aroma from the skin is offensive. A dusting powder should be used in the axillæ and groins, as the skin is likely to become macerated in these regions. The internal treatment is of equal importance. Apart from the usual hygienic and dietetic measures, he advocates the use of colloidal iodine and "Contramine" injected either intravenously or intramuscularly at intervals of five days. When the condition is very severe the injections should be given daily.

#### Multiple Benign Skin Tumours.

S. E. SWETZER (*Archives of Dermatology and Syphilology*, November, 1922) describes multiple benign tumour-like growths corresponding to the tumours of Schwenninger and Buzzi. The growths were soft, round or oval projections, from the size of a lentil to that of a bean, more or less white in colour, with a slight bluish tinge in some of them. They usually were bladder-like and could be pressed into the skin by the finger, projecting immediately again like a hernia. The larger ones were flattened and slightly puckered and harder than the smaller, from which they developed. They underwent spontaneous resolution and left only flaccid, loose, foveated scars. They appeared very gradually and without sensory symptoms on the trunk, shoulders and thighs. Several instances have been reported by different authors. Histologically there was no evidence of any degenerative processes taking place or of new growth. There was a diminution and atrophy and in some cases complete loss of the elastic fibres.

#### Chemo-Therapy of Fungus Infections.

JAY SHAMBERG AND JOHN KOLMER (*Archives of Dermatology and Syphilology*, December, 1922) have endeavoured to determine the affinities of various commonly employed drugs and of certain laboratory stains for three different pathogenic moulds, *Trichophyton rosaceum*, *Microsporon audouini* and *Achorion schoenleinii*. They employed measures designed to inhibit the growth of the fungi and others capable of killing them. They found certain selective affinities of the medicaments and dyes for both the higher and lower fungi. Iodine appears to be more efficacious than all the other medicaments in restraining the growth of certain moulds, but inferior to certain drugs in killing them. "Mercurophen" is superior to mercuric chloride and iodine as a fungicide and far superior to other medicaments tested. All the dyes were inferior to the mercurial preparations.

#### Psoriasis Vulgaris.

JULIO BRAVO (*The British Journal of Dermatology and Syphilis*, November, 1922) has treated a number of persons with psoriasis by the intravenous injection of sterilized solution of sodium salicylate after the method of Sachs. He believes the good effect is produced by the keratolytic property of the salicylic radicle. The method is simple and brings about the clearing up of lesions without the troublesome application of ointments.

## RADIOLOGY.

## Sella Turcica in Children.

M. B. GORDON AND LOOMIS BELL (*New York State Journal of Medicine*, February, 1922) publish the results of a series of examinations of the *sella turcica* in normal children. Many investigators have written of the size and shape of the *sella* and of the state of the clinoid processes. Various classifications have been attempted, but none has been satisfactory. The authors first discuss the anatomy of the *sella* and point out that the anterior clinoid processes do not actually enter into its formation, but project out over its anterior portion and sometimes appear to bridge it. The posterior and middle processes serve as attachments for the *tentorium cerebelli* and stretching anteriorly from these processes is the *diaphragma sellæ*, which is really an extension of the *tentorium*. In the centre of the *diaphragma* is the circular orifice through which the *infundibulum* runs. Thus the anterior processes are extracellular, as the *diaphragma* is attached anteriorly to the base of these processes. They may, however, show irregularity in cases of tumour. The authors have attempted many methods of classification, but could find no method satisfactory, so they have fallen back upon the method of classification by the general shape as shown in skiagrams. Group A is a generally circular-shaped *sella*, Group B is oval shaped and Group C is flattened or saucer shaped. Group A shows a well-developed, curved or straight *dorsum sellæ* and posterior clinoids; the anterior clinoids vary greatly in size and development and the floor of the *sella* is definitely curved. In Group B the posterior processes are well developed and the *dorsum sellæ* is curved and well defined. In Group C the *dorsum* is poorly developed or absent and the posterior processes appear to be part of the sphenoid, while the anterior processes are not generally well developed. Tables are given showing the actual measurements of the *sella* in various age groups from one to twelve years. Group C predominates in small heads, but there is really no relationship between the size of the head and the size of the *sella*. Sex has no influence on its size or shape.

## High Voltage X-Rays.

W. D. COOLIDGE AND W. K. KEARSLEY (*American Journal of Roentgenology*, February, 1922) describe some of their research work at the General Electric Company's laboratory on high voltage X-ray work. The article is a survey of original work carried out on voltages up to a maximum of 300,000. The Coolidge "high voltage" tube is described and the authors have used the tube for long periods with a load of 300 kilo-volts with eight milliamperes of current and they are satisfied that it will carry a still greater load. The machines used consisted of an interrupter-less transformer induction and a new constant potential generator.

The transformer was an enlargement of the well-known Victor-Snook machine, with enlarged rectifying device, the cross-arms being ninety centimetres long and the space between arms being 71.5 centimetres. The collectors were of coronaless tubing and subtended an angle of 42°. Resistance control was used and a safety device was inserted in the primary, so that the energy was cut out when the secondary current reached ten milliamperes. This device eliminates any danger from electric discharge to the patient or operator. The authors also describe a most ingenious and original machine, which produces 200 kilo-volts constant potential current. This is at present an experimental machine, but has proved satisfactory after several months' trial. Some very important results are tabled in regard to the use and limitations of the high voltage and universal tubes under various loads and conditions. In regard to the use of the transformer and induction coil for the production of X-rays, the authors consider that there is little difference in the quality or quantity of rays produced so long as the measurements are made by standard spheres and twin milliamperemeters. The voltage at the terminals of the tube must be controlled by a voltmeter in the primary circuit and the required voltage into the primary necessary for the production of a given secondary voltage should be frequently calibrated by means of the standard sphere gap at the exact milliamperage to be subsequently employed.

## Chest X-Ray Densities.

D. C. JARVIS (*American Journal of Roentgenology*, April, 1922) contributes an article on X-ray densities in the chest, based on a study of two thousand cases of granite dust inhalation. As a result of his investigations the author relies on the radiogram as showing the real condition of the lung and his most difficult problem has been in telling whether an early tuberculosis was present. Mortality statistics show that 96% of the deaths among granite workers are due to tuberculosis, yet in advanced cases it is not possible to obtain physical signs. Serial skiagrams are taken at intervals and definite changes are noted in the lungs within very short periods of time. Jarvis considers that the increase in densities is due mainly to the degree of dust infection, to the loading of the pulmonary and pleural lymphatics by dust and to peribronchial inflammation. The dust particles are inhaled into the lobules and there pass into the lymphatics. As all these lymphatics lead to the hilum, the dust travels in this direction and becomes held up at certain valves which are easy of demonstration in the pulmonary system. The lung markings are more conspicuous when lymph stasis is present. When such lymph stasis occurs the lung is apparently more suitable for the implantation of a tuberculous process. When once tuberculous infection has occurred, it rapidly extends in the damaged lung.

## Foreign Bodies in Bronchi.

CHAS. F. BOWEN (*American Journal of Roentgenology*, November, 1922) writes on the detection and removal of foreign bodies which have become impacted in the bronchus or oesophagus. The author lays stress on the importance of exact X-ray work in this field and insists that the abdomen should be examined, as well as the neck and chest. Foreign bodies, such as coins, which cast good shadows, are easy to detect, but non-opaque bodies, such as corn grains, can only be diagnosed by indirect signs, such as lung changes or obstruction to a barium meal. If the foreign body is in the oesophagus, the author recommends its removal by forceps and fluoroscope, provided it is smooth and not embedded. Otherwise it is better to use the oesophagoscope, guided by the fluoroscope, if necessary. In dealing with the bronchi the X-ray apparatus should be incorporated in the table and be instantly available to guide the bronchoscope. Non-opaque foreign bodies in the lung are common and are very difficult to diagnose. A flattening of the diaphragm, displacement of the mediastinum and darkening of the lung usually point to a foreign body on that side. Fluoroscopic control is of no value in operating in these conditions and the bronchoscope alone is used.

## Osteitis Deformans.

CECIL B. JACK (*American Journal of Roentgenology*, October, 1922) reports a case of *osteitis deformans* (Paget's disease). The clinical history is fully given. X-ray examination showed definite bony changes. In the skull there was a spongy appearance with increased transparency and great thickening. Scattered, irregular patches were seen. The heart and aorta were definitely enlarged. In the tibia and femur there was an absence of definition of cortex and cancellous tissue with no areas of rarefaction. The bones are more dense than normal. Similar changes, more advanced on the left side, were seen in the pelvis. Anti-syphilitic treatment caused improvement in symptoms and in the cranial signs and the author leans to the opinion of Lannelongue that the disease is a manifestation of hereditary syphilis in the aged, although in this instance the patient's serum did not react to the Wassermann test.

## Normal Gastric Mobility.

A. A. NIELSEN (*Acta Radiologica*, August 31, 1922) reviews the various opinions on the mobility of the stomach in healthy individuals during rest and motion. He finds a distinct difference in the emptying time of persons at rest and persons in motion. When patients were at rest, it was found that the emptying time was increased and a four to four and a half hours residue was usual. In women, whether at rest or in motion, the emptying time is longer than in men. From his observations the author considers that a six hours residue is not necessarily due to a pathological condition.



## British Medical Association News.

### SCIENTIFIC.

A MEETING OF THE WESTERN AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION was held at the Perth Hospital on November 15, 1922, Dr. D. D. PATON, the President, in the chair.

#### Charcot's Disease.

Dr. D. M. McWHAE, C.M.G., C.B.E., presented a patient who complained of a painless enlargement of the right hip joint. The affection has been present for nine years. The patient was fifty-four years of age. It was seen in the skiagram that the head of the femur was enlarged. Dr. McWhae regarded the condition as an instance of the hypertrophic form of Charcot's disease.

#### Friedreich's Ataxia.

Dr. McWHAE also showed a patient, aged seventeen years, who had sought assistance on account of a nervous condition. There was a history of ataxia for eight months. Examination revealed intention tremor of the left hand, nystagmus, diminished knee jerks and slight slurring of the speech. The diagnosis of Friedreich's ataxia was made.

#### Pigmentation of the Skin Over the Breast.

Dr. J. J. HOLLAND presented a patient in the skin of whose left breast was a pigmented area with growth of hair. The area was ten centimetres in one diameter and twelve and a half in the other. It was tender to touch.

#### Tuberculosis of the Skin.

Dr. C. JOYCE read the notes of two patients who were suffering from tuberculosis of the skin (see page 236). Both patients were present.

#### Heart Lesions.

Dr. D. S. MACKENZIE exhibited a specimen of a spontaneous rupture of the heart from a man, aged fifty-six years. He also showed a heart affected with an anæmic infarct.

#### Acute Abdominal Affections.

Dr. MACKENZIE read a paper entitled "Acute Abdomen."

Dr. J. E. F. STEWART held the opinion that it was necessary to administer morphine in general practice to tide the patient over the period until he could be moved to a hospital. He referred to an instance of rupture of a gastric ulcer not accompanied by vomiting on abdominal distension. There was severe abdominal pain, which was increased by the drinking of fluids.

Dr. R. C. MERRYWEATHER quoted a case of pain over the gall bladder with jaundice. Ten days before the date of the meeting the temperature had risen to 38.9° C. (102° F.). There had been severe pain in the region of the gall bladder. Operation had been advised, but the patient would not permit it. Six days later the patient had again become acutely ill. The temperature had been 37.2° C. (99° F.); there had been slight jaundice. On the following night the pain had become severe. The pulse rate had been 86 and the patient had been very white. A laparotomy had been performed. Advanced carcinoma of the lesser curvature of the stomach was discovered. The pain had been caused by the perforation of the stomach wall at the site of the growth.

Dr. W. TRETHOWAN considered that acute abdominal affections were of the greatest importance, both to the general practitioner and to the operating surgeon. It was necessary to consider every point in making the diagnosis. He expressed the opinion that morphine should not be given until the condition had been diagnosed. Acute appendicitis with the organ in the pelvis was very difficult to diagnose correctly. The symptoms were definite, but deep-seated, and not easily localized. Warm saline solution introduced into the peritoneal cavity as soon as it was opened would combat shock. Early operation always helped materially toward improving the diagnosis.

Dr. M. K. MOSS considered that the ideal anæsthetic for patients with acute abdominal affections in the presence of shock was oxygen and nitrous oxide.

Dr. F. A. HADLEY spoke of gangrene of the bowel. When the patient was too collapsed to withstand radical operation, if there was stercoraceous vomiting, high enterostomy gave a much better chance of recovery. In these cases anti-peristalsis was present.

Dr. C. JOYCE related the details of an operation he had performed ten years previously in a child for intussusception. Twenty-four hours later symptoms had appeared of paralysis of the bowel.

Dr. R. S. MCGREGOR, D.S.O., stated that colitis in children occasionally simulated appendicitis.

Dr. W. H. NELSON thought that stovalne anæsthesia was worthy of a trial in acute abdominal conditions, when the bowel was not distended.

Dr. R. H. CRISP spoke of the value of Sprengel's pump in emptying the abdomen of all débris. He mentioned a case of pneumococcal peritonitis which he had treated with lavage and the use of Sprengel's pump.

Dr. D. S. MACKENZIE replied to the various speakers.

#### Injectons of Sugar in Pulmonary Affections.

Dr. J. E. F. STEWART presented a paper on the use of sugar injections in pulmonary affections, including the tuberculous, which was taken as read (see page 225).

#### Differential Diagnosis Between Dengue Fever and Influenza.

THE PRESIDENT read a short paper by Dr. E. PAGET THURSTON on the differential diagnosis of dengue fever and influenza (see page 227).

### MEDICO-POLITICAL.

A MEETING OF THE VICTORIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION was held in the Lecture Room of the Walter and Eliza Hall Institute on February 24, 1923, the President, Dr. L. S. LATHAM, in the chair.

#### Financial Statements.

Dr. C. H. MOLLISON, the Honorary Treasurer, presented the balance sheets of the Victorian Branch, of the Medical Society of Victoria and of the Medical Agency (see pages 247 and 248).

The motion for the adoption of the balance sheets, moved by Dr. H. H. TURNBULL and seconded by Dr. H. FLECKER, was carried unanimously.

THE PRESIDENT paid a tribute to Dr. Mollison for the untiring care which he continued to devote to the financial affairs of the Branch.

#### ELECTION OF OFFICE-BEARERS.

In accordance with regulations of the Victorian Branch adopted in October, 1920, the Council of the Branch is required to elect its own President, Treasurer, Secretary, Librarian and Chairman of Committees. Subsequently it has been determined that there shall be two Honorary Librarians. The election of office-bearers was carried out on December 11, 1922, while at subsequent meetings of the Council the representatives of the several "Divisions" have been added to the Council.

The following is the list of office-bearers and members of the Council:

*President:* Dr. L. S. LATHAM.

*Vice-Presidents:* Dr. S. STANLEY ARGYLE, M.L.A., Dr. J. W. DUNBAR HOOPER.

*Chairman of Committees:* Dr. J. NEWMAN MORRIS.

*Honorary Treasurer:* Dr. C. H. MOLLISON.

*Honorary Secretary:* Dr. F. L. DAVIES.

*Honorary Librarians:* DR. H. DOUGLAS STEPHENS, DR. W. G. DISMORE UPJOHN, O.B.E..  
*Representatives on Federal Committee:* MR. G. A. SYME, DR. R. H. FETHERSTON.  
*Representative on Representative Body:* DR. GAVIN MCCALLUM (DR. W. J. LONG as Deputy Representative).  
*Representative on Council of British Medical Association:* DR. T. P. DUNHILL.  
*Correspondent to "The British Medical Journal":* DR. REGINALD WEBSTER.  
*Members of Council Elected by "Divisions":*  
*Melbourne:* DR. R. M. DOWNES, C.M.G., DR. J. W. DUNBAR HOOPER, DR. J. F. WILKINSON.  
*Southern Metropolitan:* DR. J. P. MAJOR.  
*South-Central Metropolitan:* DR. F. E. MCAREE.  
*Western Metropolitan:* DR. B. MILNE SUTHERLAND.

*Northern Metropolitan:* DR. J. H. PESTELL.  
*North-Eastern Metropolitan:* DR. ALLEN ROBERTSON.  
*Eastern Metropolitan:* DR. WALTER SUMMONS, O.B.E..  
*South-Eastern Metropolitan:* DR. F. L. DAVIES.  
*Central:* DR. W. A. SPRING.  
*Southern:* DR. J. E. PIPER.  
*South-Eastern:* DR. G. A. HAGENAUER.  
*South-Western:* DR. G. H. BROINOWSKI (since deceased); DR. S. C. FITZPATRICK (appointed later).  
*North-Eastern:* DR. J. W. FLORANCE.

*Members of Council Elected by the Members at the Annual General Meeting:* DR. A. V. M. ANDERSON, DR. S. STANLEY ARGYLE, DR. R. J. BULL, DR. A. GRAHAM BUTLER, D.S.O., DR. R. H. FETHERSTON, DR. J. GORDON, DR. VICTOR HURLEY, C.M.G., DR. FAY

## VICTORIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

Revenue and Expenditure Account for Period from January 12, 1922, to January 11, 1923.

EXPENDITURE.	£	s.	d.
To Medical Society of Victoria .. . . .	1,725	8	9
" British Medical Association .. . . .	1,282	1	0
" Federal Committee .. . . .	181	8	0
" Postages, Duty Stamps <i>et cetera</i> .. . . .	67	7	0
" Printing .. . . .	67	13	6
" Stationery .. . . .	22	1	6
" Commission (New Members) .. . . .	13	0	0
" Advertising .. . . .	10	1	9
" Audit, 1921 .. . . .	2	2	0
" Rebates (Divisions) .. . . .	54	9	0
" Telephone .. . . .	6	4	0
" Gratuity (Melbourne Hospital) .. . . .	10	10	0
" Bonus (Assistant, Melbourne Hospital) .. . . .	2	10	6
" Evans Bros., re New Buildings .. . . .	10	10	0
" Funeral Wreath .. . . .	2	12	6
" Sundries .. . . .	5	19	1
" Clerical Assistance .. . . .	5	5	0
" Repairs .. . . .	1	10	4
" Bank Charges .. . . .	3	1	5
" Electric Light .. . . .	4	18	2
" Balance—			
Advance to Australasian			
Medical Congress .. . . .	£43	17	7
War Memorial .. . . .	1	12	0
Organization Fund .. . . .	100	0	0
Cash in Hand .. . . .	3	0	0
Cash in Bank of Victoria, Limited .. . . .	474	1	1
	622	10	8
	£4,101	4	2

REVENUE.	£	s.	d.
By Balance, January 12, 1922 .. . . .	332	15	2
" Subscriptions—			
Metropolitan Members .. . . .	£2,252	6	9
Country Members .. . . .	1,283	18	6
Junior Members .. . . .	229	10	9
Capitation (London) .. . . .	2	13	0
	3,768	9	0
	£4,101	4	2

## Balance Sheet as at January 11, 1923.

LIABILITIES.	£	s.	d.
To Balance as above .. . . .	622	10	8
	£622	10	8

ASSETS.	£	s.	d.
By Bank of Victoria, Limited .. . . .	474	1	1
" Trustees, Organization Fund .. . . .	100	0	0
" War Memorial .. . . .	1	12	0
" Cash in Hand .. . . .	3	0	0
" Australasian Medical Congress .. . . .	43	17	7
	£622	10	8

Audited and found correct,

J. V. M. WOOD &amp; Co., F.I.A.A.,

Accountants.

Melbourne, February 7, 1923.

C. STANTON CROUCH,  
Secretary.CRAWFORD H. MOLLISON,  
Honorary Treasurer.

MACLURE, DR. J. NEWMAN MORRIS, DR. ALAN NEWTON, DR. H. DOUGLAS STEPHENS, DR. W. G. DISMORE UPJOHN, O.B.E., DR. A. E. ROWDEN WHITE, DR. B. T. ZWAR.

The following sub-committees have been appointed:

**Organization:** DR. R. H. FETHERSTON, DR. J. GORDON, DR. J. P. MAJOR, DR. F. E. MCAREE, DR. J. H. PESTELL, DR. ALLEN ROBERTSON, DR. B. MILNE SUTHERLAND, DR. J. F. WILKINSON, DR. B. T. ZWAR.

**Ethical:** DR. A. V. M. ANDERSON, DR. A. GRAHAM BUTLER, DR. FAY MACLURE, DR. ALAN NEWTON, DR. B. MILNE SUTHERLAND, DR. WALTER SUMMONS, MR. G. A. SYME, DR. W. G. DISMORE UPJOHN.

**Legislative:** DR. S. S. AEGYLE, DR. R. M. DOWNES, DR. R. H. FETHERSTON, DR. VICTOR HURLEY, DR. ALAN NEWTON, DR. B. T. ZWAR.

**House:** DR. C. H. MOLLISON.

**Scientific:** DR. R. J. BULL, DR. K. HILLER, DR. VICTOR HURLEY, DR. FAY MACLURE, DR. ALAN NEWTON, DR. S. W. PATTERSON, DR. H. DOUGLAS STEPHENS, DR. B. MILNE SUTHERLAND, DR. W. G. DISMORE UPJOHN, DR. A. E. ROWDEN WHITE.

**Medical Agency:** DR. R. M. DOWNES, DR. W. KENT HUGHES, DR. C. H. MOLLISON, DR. W. G. DISMORE UPJOHN.

**Building:** DR. R. H. FETHERSTON, DR. J. W. DUNBAR HOOPER, DR. W. KENT HUGHES, DR. C. H. MOLLISON, DR. A. E. ROWDEN WHITE, DR. J. F. WILKINSON, DR. B. T. ZWAR.

**Library:** DR. H. DOUGLAS STEPHENS, DR. W. G. DISMORE UPJOHN.

The following members were appointed as representatives of the Victorian Branch on the committees of the institutions named:

**Bush Nursing Association:** DR. H. DOUGLAS STEPHENS, DR. B. MILNE SUTHERLAND.

**Advisory Board to Medical Inspector of Schools:** DR. B. T. ZWAR.

**Free Kindergarten Union:** DR. W. KENT HUGHES.

**Victorian Baby Health Centres:** DR. R. M. DOWNES, DR. W. G. DISMORE UPJOHN.

**Post-Graduate Permanent Committee:** DR. A. V. M. ANDERSON, DR. J. W. DUNBAR HOOPER.

**Queen's Memorial Infectious Diseases Hospital:** DR. J. NEWMAN MORRIS.

**Melbourne University Association:** DR. W. G. DISMORE UPJOHN.

**Society for Combating Venereal Diseases:** DR. R. H. FETHERSTON, DR. J. W. DUNBAR HOOPER, DR. VICTOR HURLEY, DR. A. L. KENNY, DR. FAY MACLURE, DR. J. P. MAJOR, DR. ALAN NEWTON, MR. G. A. SYME, DR. W. G. DISMORE UPJOHN, DR. J. F. WILKINSON.

**Massacurs Registration Board:** DR. HUGH MURRAY, DR. J. W. SPRINGTHORPE.

#### MISSING JOURNALS.

THE following journals, which have been received by THE MEDICAL JOURNAL OF AUSTRALIA as exchanges, are missing. Each copy bears the stamp impression of this journal. It is requested that the present possessors of these missing journals return them to this office.

*The American Journal of Anatomy:* May, 1920.

*Bulletin of the Johns Hopkins Hospital:* March, April, September, 1916; February, April, May, July, 1918; June, July, September, 1920.

*The Journal of Orthopedic Surgery:* February, 1921.

*New York Medical Journal:* February 28, May 29, December 11, 1920; Index, January to June, 1921.

#### NOMINATIONS AND ELECTIONS.

THE undermentioned has been nominated for election as a member of the New South Wales Branch of the British Medical Association:

HARPER, HAMILTON SIDNEY, M.B., Ch.M., 1922 (Univ. Sydney), Mendooran.

THE undermentioned have been elected as members of the New South Wales Branch of the British Medical Association:

FITZSIMMONS, JAMES PETER, M.B., Mast. Surg., 1921 (Univ. Sydney), Lyons Road, Drummoyne.

#### MEDICAL SOCIETY OF VICTORIA.

Revenue and Expenditure Account for Period from January 12, 1922, to January 11, 1923.

EXPENDITURE.		£	s.	d.
To THE MEDICAL JOURNAL OF AUSTRALIA .. ..		975	10	0
" Salaries—				
Secretary .. .. .	£412 0 0			
Assistant Secretary (Part Salary) .. .. .	85 2 2			
Caretaker .. .. .	41 0 0			
Library Clerk .. .. .	57 0 0			
		595	2	2
" Library (Journals and Binding) .. .. .		94	16	1
" Postages .. .. .		67	17	4
" General Expenses .. .. .		5	17	0
" Rates, Taxes and Insurance .. .. .		19	19	11
" Light and Power .. .. .		4	18	1
" Audit for 1921 .. .. .		3	3	0
" Bank Charges .. .. .		4	4	7
" Repairs .. .. .		9	7	0
" Telephone .. .. .		6	3	11
" Balance in Bank of Victoria, Limited .. ..		169	16	5
		£1,956	15	6

REVENUE.		£	s.	d.
By Balance, January 12, 1922 .. .. .		127	10	11
" Subscriptions, 1922 .. .. .		1,725	8	9
" Library Refund by Medical Agency (two years) .. .. .		103	15	10

£1,956 15 6

Audited and found correct,

J. V. M. Wood & Co., F.I.A.A.,

Accountants.

Melbourne, February 7, 1923.

C. STANTON CROUCH,  
Secretary.

CRAWFORD H. MOLLISON,  
Honorary Treasurer.



HARWOOD, HORACE BARCLAY, M.B., Ch.M., 1922 (Univ. Sydney), Royal Prince Alfred Hospital, Camperdown.

OVEREND, BRUCE ROBSON, M.B., Mast. Surg., 1921 (Univ. Sydney), Trundle.

RYAN, WILLIAM EDMOND, M.B., Ch.M., 1921 (Univ. Sydney), 61, Ernest Street, Crow's Nest.

WALKER-SMITH, ANGUS BUCHANAN, M.B., Ch.M., 1922 (Univ. Sydney), 1, Tower Street, Manly.

THE undermentioned have been elected as members of the Queensland Branch of the British Medical Association:

DUNSTAN, CHESTER KINGSLEY, M.B., Ch.M., 1922 (Univ. Sydney).

MASON, ALFRED ERIC, M.B., B.S., 1922 (Univ. Melbourne), Brisbane.

McKILLIP, MARTIN JOSEPH, M.B., Ch.M., 1921 (Univ. Sydney), Brisbane.

## Medical Matters in Parliament.

### THE HOSPITALS AND CHARITIES BILL.

(Continued from page 222.)

ON September 26, 1922, the House went into committee. The first three clauses were adopted without amendment.

Clause 9, dealing with the constitution of the Board, was dealt with, for, as explained by Mr. McPHERSON, it was the crux of the whole measure.

MR. OLD moved an amendment to Sub-Clause 2, dealing with the constitution of the Board, as follows:

(2) The Board shall consist of fourteen members appointed by the Governor in Council, as follows:

(a) Four persons nominated by the body known as the Metropolitan Hospitals' Association, one at least of whom shall be a legally qualified medical practitioner;

(b) Four persons nominated by the body known as the Country Hospitals' Association, one at least of whom shall be a legally qualified medical practitioner;

(c) Two persons to be appointed from persons nominated by the committees of subsidized institutions and benevolent societies within the metropolis (other than hospitals), one at least of whom shall be a woman;

(d) Two persons to be appointed from persons nominated by the committees of subsidized institutions and benevolent societies outside the metropolis (other than hospitals), one at least of whom shall be a woman; and

(e) Two other persons, one of whom shall also be appointed as a member of the Metropolitan Standing Committee and the other as a member of the Country Standing Committee hereinafter provided for.

MR. McPHERSON intimated that the Government intended to accept the amendment.

The amendment was approved.

MR. OLD moved that the clause as agreed to in the amendment be inserted as the new sub-clause.

MR. McLACHLAN moved as an amendment:

That the words "fourteen members" be omitted with a view to inserting the words "three members appointed by the Government for a term of three years, one member to be selected from country charities, and that the salaries of each be £600 per annum with expenses."

The amendment was lost.

MR. J. W. BILLSON moved an amendment as follows:

That paragraph (e) be omitted with a view of inserting—

(e) Two other persons, one of whom shall be nominated by the Melbourne Trades Hall Council and shall also be appointed as a member of the Metropolitan Standing Committee, and the other shall be nominated by the Trades Hall Councils in the country and shall be appointed as a member of the Country Standing Committee hereinafter provided for.

MR. BILLSON pointed out that the workers were unable to record their votes at many of the hospital elections on account of the hours at which these elections were conducted. He maintained that the workers were not wanted when it came to the question of spending money, but were only required to find the money. He saw no other way of getting representation than in the way he had proposed.

MR. McPHERSON said that the Government could not agree to the inclusion of anything of a class nature in the Bill. He would not give direct representation, but would undertake to include in the Bill a provision that would compel hospital committees to hold their elections at such suitable hours as would enable the workers to vote. If the amendment were carried, it would interfere with the Government representation.

The amendment was lost by a small majority.

MR. OLD's motion for the inclusion of the new sub-clause was carried.

In view of the amended nature of the clause, Sub-Clause 3 of Clause 9 was omitted on the motion of Mr. Old.

In regard to the tenure of office of the appointed members, Mr. Old moved as an amendment the following:

That Sub-Clause (1) be omitted, with the view of inserting—

(1) Subject to this Act—

(a) Members of the Board shall be entitled to hold office for four years and shall be eligible for re-appointment: Provided that one-half of each class of the members first appointed shall retire at the end of two years; and the Board shall determine by lot which of such members shall retire; and thereafter the members who shall retire shall be those who have been longest in office;

(b) Members of the Board may be removed by the Governor in Council.

The amendment was agreed to, as also was the following amendment:

If any member—

(a) is absent without leave of the Board from four consecutive meetings of the Board; or

(b) by writing under his hand addressed to the Chairman resigns his office as a member—

his seat on the Board shall thereupon become vacant.

In regard to the filling of vacancies on the Board, the following amendment by Mr. Old was agreed to:

That the following sub-clauses be inserted:

(3) Subject to this Act, the Governor in Council may appoint a qualified person to fill any vacancy however occurring in the office of a member of the Board.

(4) A person appointed to fill a casual vacancy shall be entitled to hold office only for the unexpired portion of the period for which his predecessor was appointed.

(5) If at any time any body of persons entitled to nominate a person for appointment to the Board fails, neglects or refuses to make such nomination, the Governor in Council may without nomination appoint any person to be a member of the Board and the person so appointed shall for all purposes be deemed to have been duly appointed as a member of the Board.

MR. OLD at this stage pointed out that the amendments already passed had dispensed with the Director of Charities. In view of this the clause dealing with his appointment (Clause 13) was omitted.

The clause prohibiting members of the Board from being interested in contracts was agreed to, as were those dealing with the meetings of the Board.

In connexion with Clause 18, dealing with the formation of two standing committees of the Board for metropolitan and country institutions respectively, DR. ARGYLE proposed the following sub-clause as an addition:

(2) (a) Each standing committee shall elect one of its members to be chairman thereof annually or whenever a vacancy occurs;

(b) The chairman shall be entitled to hold office for one year unless he sooner ceases to hold such office or to be a member of the Board;

(c) At any meeting of each standing committee the chairman or, if there is no chairman, or if the chairman is absent, any member elected by the members present to act as chairman of such meeting shall preside, and, in case of an equality of votes, shall have a second or casting vote;

(d) If at any election of a chairman of either of such standing committees there is an equality of votes it shall be decided by lot which of the members obtaining an equal number of votes shall be chairman.

Dr. Argyle said that the whole working possibilities of the Bill lay in these two standing committees. It would be impossible for one Board sitting in Melbourne to deal effectively with town and country institutions without causing misunderstandings and dissatisfaction.

An amendment by MR. WEBBER to restrict the chairman of the standing committee to a casting vote only was defeated.

DR. ARGYLE'S new sub-clause was agreed to and the clause adopted.

DR. FETHERSTON was not content with Clause 20, which provided, *inter alia*:

(1) Each standing committee may—

(a) meet at such times and places as it thinks fit and adjourn any meeting to another time or place;

(b) act by any three of its members; and

(c) Regulate its own proceedings:

Provided that each standing committee shall hold at least one meeting in every month.

On the motion of Dr. Fetherston it was agreed that the word "three" be omitted and "four" inserted in lieu thereof and that the word "month" be omitted and the words "two months" be inserted in lieu thereof.

In regard to Clause 21, providing, *inter alia*:

(1) The Governor in Council may appoint some person to be Director of Charities.

(2) The Director of Charities—

(a) shall be paid a salary at the rate of £1,000 per annum; and

(b) shall not, as such, be subject to the provisions of the *Public Service Acts*.

DR. ARGYLE moved:

That in Sub-Clauses (1) and (2) the word "Director" be omitted and the word "Inspector" be inserted in lieu thereof.

The amendment was adopted.

DR. ARGYLE also moved:

That the words "at the rate of" be omitted with a view to inserting the words "not exceeding."

The amendment was approved.

It was also agreed, on the motion of Dr. Argyle:

That wherever the word occurs, "Director" be omitted and "Inspector" inserted.

DR. ARGYLE moved that the following sub-clause of Clause 21 be omitted:

(6) Notwithstanding anything in any Act, any Director of Charities who, immediately before the date of his appointment as such, is an officer of the Public Service, shall (while being or continuing to be or on ceasing to be Director of Charities) be eligible, on the recommendation of the Public Ser-

vice Commissioner, to be appointed to an office in the Public Service with a classification and emolument corresponding with or higher than that which he held in the Public Service immediately before the said date, as if the period of his service as Director of Charities had been service in the Public Service.

In reply to MR. WEBBER, MR. MCPHERSON said that it was the intention of the Government to appoint an inspector from outside the Public Service.

MR. J. W. BILLSON opposed the amendment. It was hard on a man in the Public Service, for, if he were appointed inspector, it would be necessary for him to resign a permanent position in order to take up a temporary one.

MR. CAIN thought that the best man should be available for selection, either from within or outside the Public Service.

The amendment was agreed to.

On the motion of DR. ARGYLE the clause dealing with the duties of the Director of Charities was omitted and the following was substituted:

A. (1) It shall be the duty of the Board—

(a) to make or cause to be made careful inquiry into the administration and management of every subsidized institution or benevolent society;

(b) to cause every subsidized institution to be inspected from time to time and at least once in every financial year.

(2) The results of all such inquiries and inspections shall be reported to the Board.

(3) The Inspector of Charities shall, in addition to any other duties conferred or imposed on him, discharge such duties in connexion with his office as are prescribed or as are required by the Board.

(4) The Minister may from time to time require the Inspector of Charities to report to him and furnish such information to him in connexion with such matters as the Minister requires and copies of any such report or information so furnished shall forthwith be forwarded by the said inspector to the Board.

On the motion of Dr. Argyle, Clause 23, dealing with the appointment of officers of the Board, was amended in such a manner that the Board would have the right to appoint its own officers other than the Inspector.

In regard to Clause 24, dealing with the duties of the Board and providing, *inter alia*:

Subject to this Act, it shall be the duty of the Board from time to time to make such inquiries as it thinks fit and to report to the Minister as to—

(a) what charitable relief is required to meet the needs of the diseased, infirm, incurable, poor or destitute persons resident in Victoria (including children);

DR. ARGYLE moved that after the word "children" the words "and convalescents" be inserted. He said that the inclusion of these words provided for the establishment of convalescent hospitals in connexion with the larger charities. The provision of such institutions would relieve the pressure on metropolitan hospitals to the extent of about 50%.

The amendment was adopted.

In regard to the sub-clauses of this clause dealing with the power of the Board to the allocation of subsidies to various institutions, MR. WEBBER pointed out that there should be some method of appeal by an institution that thought it had not received a fair proportion of subsidy.

MR. MCPHERSON pointed out that the recommendations of the Board would be published before they received ministerial sanction and that any committee of any institution who was dissatisfied, could appeal to the Minister. No other method of appeal was possible.

The amendment was adopted.

In discussing Clause 25, dealing with the powers of the Board to close or amalgamate institutions (not being separate institutions), MR. MCPHERSON pointed out that it might be advisable to close an institution in a worn-out mining district. There was no intention of interfering with the

property of church institutions. If it were decided to close an institution and the land on which that institution was built had been given by the Crown, the land would revert to the Crown.

Dr. FETHERSTON pointed out that such institutions as the Elizabeth Fry Retreat would be dealt with unfairly under the provisions of the Bill.

Mr. MCPHERSON undertook to look into the matter and to see that no injustice was done to any institution.

Mr. WEBBER held that there was no adequate provision for an appeal by the committee of an institution that it was proposed to close.

Mr. MCPHERSON said that the final decision rested with the Governor-in-Council. In order to allow adequate time for an appeal, he intended to draft an amendment suggested by Dr. Argyle, providing for an interval of either fourteen or twenty-eight days between the recommendation of the Board and the decision of the Minister.

The clause was agreed to, as were also those dealing with the condition under which the Board may exercise powers of requiring institutions *et cetera* to be closed and the conditions for the amalgamation of institutions. Some discussion ensued on the provision in Clause 28, dealing with the restrictions on the exercise of the powers of the Board to recommend that institutions be closed or amalgamated, unless the recommendation were made at a meeting of the Board at which not less than eleven members were present.

Mr. WEBBER thought that, as the number of members of the Board had been increased from thirteen to fourteen, the clause should provide for more than eleven members to be present in the circumstances under consideration.

Dr. FETHERSTON pointed out that, by stopping away, three members could hold up the whole business of the Board. He thought that it would be better to provide that a quorum should consist of eleven members and that a recommendation for the closing of an institution must be carried by an absolute majority of the Board.

Mr. MCPHERSON undertook to have an amendment drafted along these lines.

Clause 29, dealing with the procedure on recommendation by the Board for the closing or amalgamation of institutions was agreed to, as were also those dealing with:

(a) The consequences of amalgamation of subsidized institutions.

(b) The consequences of determination that an institution be closed.

(c) The necessity of obtaining the consent of the Board before the establishment of an institution or benevolent society.

In discussing Clause 33, dealing with the compulsory registration of institutions and benevolent societies, it was stated by Mr. MCPHERSON, in reply to Mr. WEBBER, this would be applicable to any place that appealed to the public for funds.

The clause was agreed to, as were also those dealing with: (i.) the registration of existing institutions, the power of the Board to refuse registration in certain cases and the right of appeal to the Minister against such refusal; (ii.) the registration of institutions and benevolent societies on their establishment; (iii.) the keeping of a register of all institutions and benevolent societies; (iv.) the disabilities of unregistered institutions and the penalties attached to non-registration; (v.) the powers of the Board to cancel registration; (vi.) the effect of cancellation.

## Obituary.

### IN MEMORY OF WILLIAM ROBERT ASPINALL AND ARTHUR CYRIL ALBERT JEKYLL.

A MEMORIAL tablet to the honour of William Robert Aspinall and Arthur Cyril Albert Jekyll, who died on active service on May 17, 1916, and July 20, 1917, was unveiled at the Sydney Hospital on February 8, 1923, in the presence of a large gathering.

PROFESSOR A. E. MILLS performed the ceremony of unveiling the tablet. He said:

"This tablet that I am asked to unveil is to commemorate the memory of Robert Aspinall and Arthur Jekyll—two of our gallant comrades who lost their lives in that great war that was waged for the rights of small nations, for the liberty and freedom of the whole world; a righteous war, for even war with all its attendant horrors can be righteous, if its cause be just. And who of us doubts the righteousness of the cause for which we fought? Surely it was the righteousness and justice of our cause that impelled the thousands of Australia's choicest manhood to take up arms and go forth to fight like the crusaders of old; to leave home and friends and family, to endure hardships, to suffer pain and, if need be, to sacrifice life itself. And as it was with thousands of others, so was it with our two comrades whose memory we honour this day. They heard the still small voice of conscience, in harmony with the spirit of righteousness, urging them to pay heed to the insistent call of our brothers overseas for help to maintain liberty and freedom and justice and to dethrone tyranny.

"Willingly, eagerly, they responded to the call. Gallantly they sallied forth—alas, to return no more.

"It could have been otherwise in the case, at least, of Robert Aspinall. For during his stay in Egypt he was seized with pneumonia and almost died from this fell disease. He was invalided home, but he managed to persuade those in authority to allow him to go on to France, where he met his death. It is some consolation to know that death came to these young men suddenly; that they knew no pain. They died in the performance of their duties—duties which caused them to share the same dangers and hardships of their combatant comrades.

"Throughout the ages it has been the custom to commemorate the lives and deeds of brave and great men. We who were the friends and comrades of Dr. Aspinall and Dr. Jekyll, believe that they were brave and great. Of their bravery there is no question. Is it not recorded that Robert Aspinall was awarded the Military Cross for conspicuous valour in the field? And there is ample testimony that Arthur Jekyll nobly performed his duties, no matter what dangers threatened.

"Nor as to their greatness can there be dispute. For greatness consists not only in the accomplishment of great deeds, but in the striving to do them. It is the will to do them, the spirit that urges, that really matters. Truly a great spirit pervaded the lives of our dead friends.

"It is fitting then that you who knew and loved them so well, should commemorate their lives and deeds by erecting this tablet to their memory. It will serve to recall your associations with two gallant friends and comrades at the University and on the field of battle. You will remember the prominent part that Robert Aspinall took in all the activities of the student life at the University and of his success in his medical studies, as shown by the fact that he passed with credit at the final examination. Nor will you forget the achievements of Arthur Jekyll in University sport, particularly in football. But your best and most cherished memories of our two friends will be their modest, lovable natures and their high characters.

"It is fitting, too, that this tablet should be erected in the Sydney Hospital, where our late friends received most of their clinical instruction and where they gained that knowledge that qualified them for the duties they performed so well, in the doing of which they met their death.

"May this tablet be an inspiration to the hundreds of students who in the future will receive instruction within these walls, to do their duty and walk even unto death in the path of righteousness and honour, as did Robert Aspinall and Arthur Jekyll."

### COLIN CAMPBELL.

We record with regret that Dr. Colin Campbell, of Yea, Victoria, who graduated at the University of Melbourne in 1911, died on February 15, 1923, at the age of thirty-three.

### ALFRED PETER ROSS.

It is with regret that we record the death of Dr. Alfred Peter Ross, of Wynnum South, Queensland, which took place on February 17, 1923.



## Proceedings of the Australian Medical Boards.

### QUEENSLAND.

THE undermentioned have been registered under the provisions of the *Medical Act of 1867* as duly qualified medical practitioners:

- DUNSTAN, CHESTER KINGSLEY, M.B., Ch.M., 1922 (Univ. Sydney), Atherton.  
 HANLEY, EDWARD JOSEPH, M.B., B.S., 1920 (Univ. Melbourne), Eumundi.  
 HUGHES, JOHN, M.B., Ch.M., 1920 (Univ. Sydney), Clermont.  
 PATTERSON, ALEXANDER EDGAR, M.B., Ch.M., 1922 (Univ. Sydney), Toowoomba.  
 RYAN, WILLIAM DENNIS, M.B., Ch.M., 1921 (Univ. Sydney), Brisbane.

### Books Received.

- PUERPERAL SEPSIS AND ITS PROPHYLAXIS, by Eustace Thorp, O.B.E., L.R.C.S., L.R.C.P., L.F.P.S.G., D.P.H.; 1922. Bristol: John Wright & Sons, Limited; Crown 8vo., pp. 48, with six charts. Price: 2s. 6d. net.  
 ŒUVRES DE PASTEUR, Réunies par le Docteur Pasteur Vallery-Radot (Collection des Thèses et des Mémoires scientifiques en sept volumes); 1922. Paris: Masson et Cie; Demy 4to.  
 Tome Premier: Dissymétrie Moléculaire, pp. 480. Price: Frs. 50 net.  
 Tome Deuxième: Fermentations et Générations Dites Spontanées, pp. 664. Price: Frs. 65 net.

### Medical Appointments.

THE undermentioned have been re-appointed Members of the Advisory Committee for the purposes of the *Pure Food Act, 1908*, of New South Wales: DR. W. G. ARMSTRONG (B.M.A.), DR. R. DICK (B.M.A.), DR. E. W. FERGUSON (B.M.A.), DR. J. S. PURDY, D.S.O. (B.M.A.).

DR. R. M. MACKAY (B.M.A.) has been appointed Third Government Medical Officer, Office of the Director-General of Public Health, New South Wales.

DR. CHARLES BADHAM (B.M.A.) has been appointed Junior Assistant Microbiologist, Office of the Director-General of Public Health, New South Wales.

DR. W. A. LUKE (B.M.A.) has been appointed Public Vaccinator at Box Hill, Victoria.

DR. C. P. ROWAN (B.M.A.) has been appointed a District Health Officer in Victoria.

DR. FREDERICK J. CLARK (B.M.A.) and DR. RICHARD GREEN (B.M.A.) have been appointed Senior Resident Medical Officer and Junior Resident Medical Officer respectively at the Fremantle Public Hospital, Western Australia.

DR. W. S. COOK (B.M.A.) has been appointed Junior Resident Medical Officer at the Perth Hospital, Western Australia.

### Medical Appointments Vacant, etc..

FOR announcements of medical appointments vacant, assistants, locum tenentes sought, etc., see "Advertiser," page xviii..

BABINDA DISTRICT HOSPITAL, CAIRNS, QUEENSLAND: Medical Officer.

BENEVOLENT SOCIETY OF NEW SOUTH WALES: Junior Resident Medical Officer of the Royal Hospital for Women, Paddington.

CHARTERS TOWERS DISTRICT HOSPITAL, QUEENSLAND: Junior Resident Medical Officer.

ST. GEORGE DISTRICT HOSPITAL, KOGARAH, NEW SOUTH WALES: Chief Resident Medical Officer.

### Medical Appointments: Important Notice.

MEDICAL practitioners are requested not to apply for any appointment referred to in the following table, without having first communicated with the Honorary Secretary of the Branch named in the first column, or with the Medical Secretary of the British Medical Association, 429, Strand, London, W.C..

BRANCH.	APPOINTMENTS.
NEW SOUTH WALES: Honorary Secretary, 30 - 34, Elizabeth Street, Sydney	Australian Natives' Association Ashfield and District Friendly Societies' Dispensary Balmmain United Friendly Societies' Dispensary Friendly Society Lodges at Casino Leichhardt and Petersham Dispensary Manchester Unity Oddfellows' Medical Institute, Elizabeth Street, Sydney Marrickville United Friendly Societies' Dispensary North Sydney United Friendly Societies People's Prudential Benefit Society Phoenix Mutual Provident Society
VICTORIA: Honorary Secretary, Medical Society Hall, East Melbourne	All Institutes or Medical Dispensaries Australian Prudential Association Proprietary, Limited Manchester Unity Independent Order of Oddfellows Mutual National Provident Club National Provident Association
QUEENSLAND: Honorary Secretary, B.M.A. Building, Adelaide Street, Brisbane	Brisbane United Friendly Society Institute Stannary Hills Hospital
SOUTH AUSTRALIA: Honorary Secretary, 12, North Terrace, Adelaide	Contract Practice Appointments at Renmark Contract Practice Appointments in South Australia
WESTERN AUSTRALIA: Honorary Secretary, Saint George's Terrace, Perth	All Contract Practice Appointments in Western Australia
NEW ZEALAND (WELLINGTON DIVISION): Honorary Secretary, Wellington	Friendly Society Lodges, Wellington. New Zealand

### Diary for the Month.

- MAR. 6.—New South Wales Branch, B.M.A.: Ethics Committee; Executive and Finance Committee.  
 MAR. 7.—Victorian Branch, B.M.A.: Branch.  
 MAR. 8.—New South Wales Branch, B.M.A.: Nomination of Candidates for Election of the Council.  
 MAR. 9.—Queensland Branch, B.M.A.: Council.  
 MAR. 9.—South Australian Branch, B.M.A.: Council.  
 MAR. 14.—Western Australian Branch, B.M.A.: Council.  
 MAR. 15.—New South Wales Branch, B.M.A.: Medical Politics Committee; Organization and Science Committee.  
 MAR. 15.—Victorian Branch, B.M.A.: Council.  
 MAR. 20.—New South Wales Branch, B.M.A.: Council (Quarterly Meeting).  
 MAR. 21.—Western Australian Branch, B.M.A.: Branch.  
 MAR. 21.—South Sydney Medical Association, New South Wales: Annual Meeting.  
 MAR. 22.—Brisbane Hospital for Sick Children: Clinical Meeting.  
 MAR. 23.—New South Wales Branch, B.M.A.: Branch (Annual Meeting).  
 MAR. 23.—Queensland Branch, B.M.A.: Council.

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